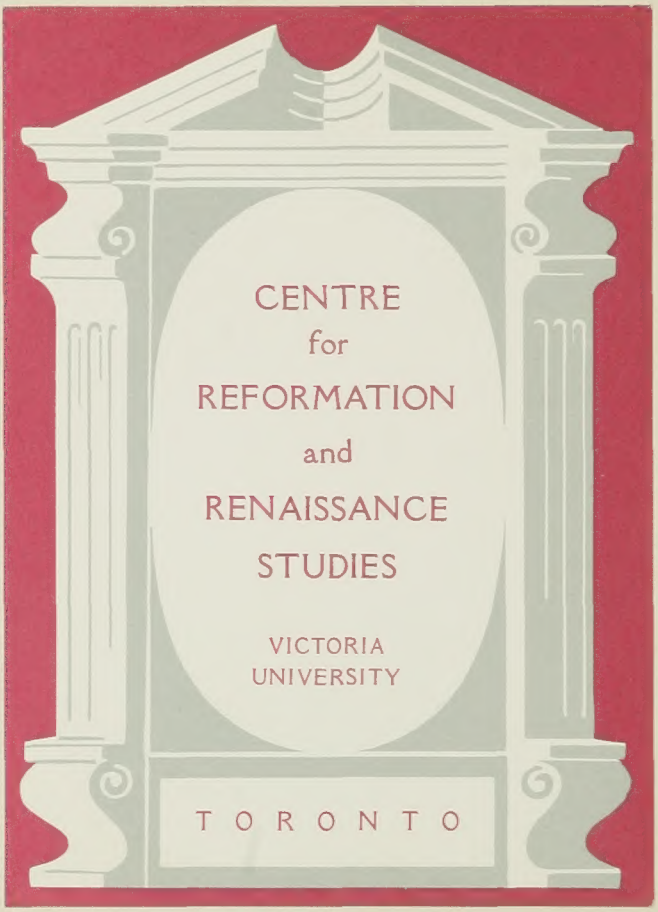



CENTRE
for
REFORMATION
and
RENAISSANCE
STUDIES
VICTORIA
UNIVERSITY
TORONTO

59786
2 vols

PUBLICATIONS

OF THE

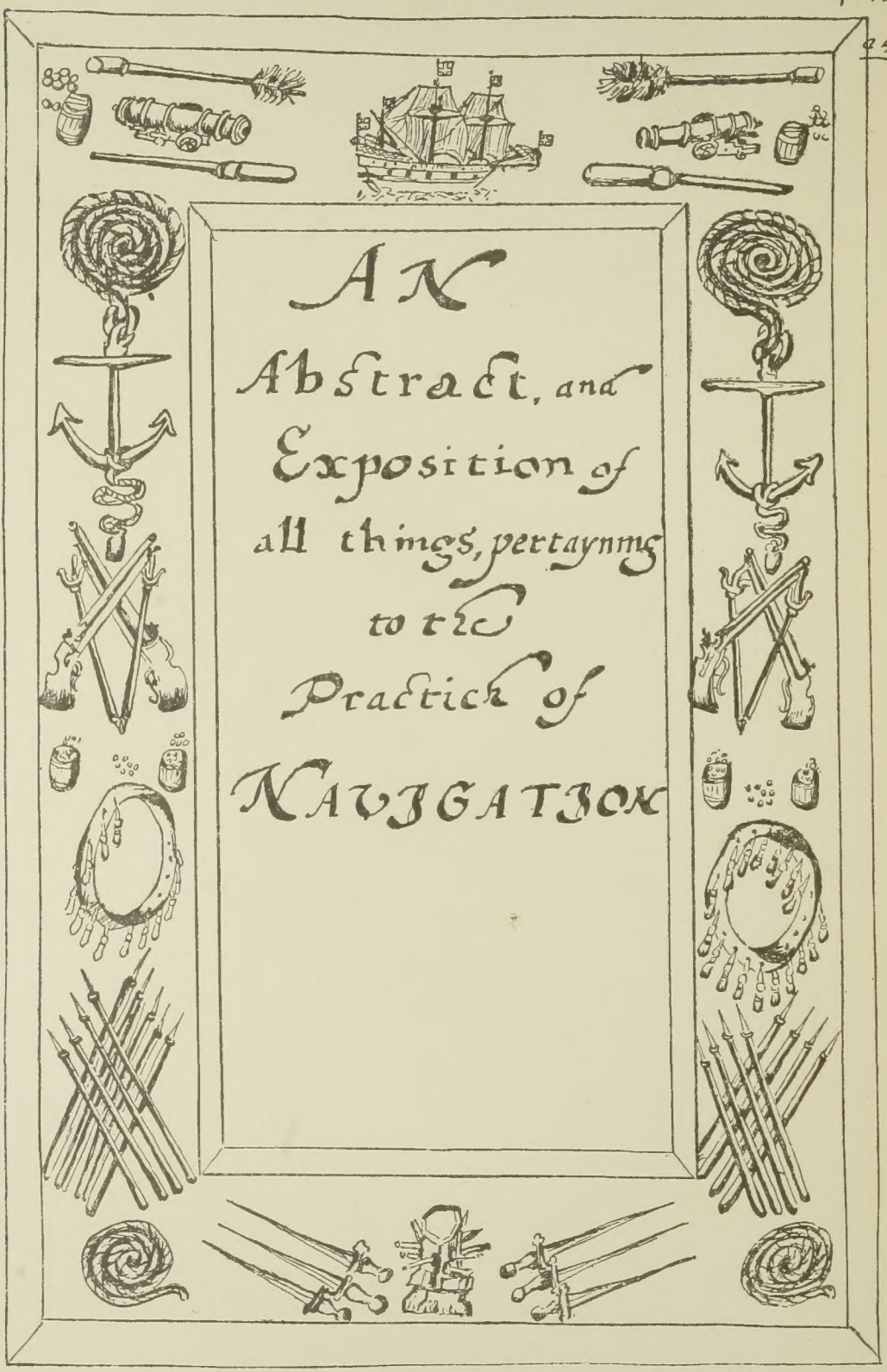
NAVY RECORDS SOCIETY

VOL. LVI

THE LIFE AND WORKS OF SIR HENRY MAINWARING

VOL. II

Petri Le Neve Norroy



THE LIFE AND WORKS OF
SIR HENRY MAINWARING

VOL. II

EDITED BY
G. E. MANWARING
AND
W. G. PERRIN



PRINTED FOR THE NAVY RECORDS SOCIETY
MDCCCCXXII

REF. & REF.

THE COUNCIL

OF THE

NAVY RECORDS SOCIETY

1921–1922

PATRON

THE KING

PRESIDENT

THE LORD GEORGE HAMILTON, P.C., G.C.S.I.

VICE-PRESIDENTS

BRINDLEY, HAROLD H., F.S.A.

MARSDEN, R. G.

NEWBOLT, SIR HENRY

RICHMOND, REAR-ADMIRAL HERBERT W., C.B.

COUNCILLORS

ANDERSON, R. C., F.S.A.

ATKINSON, C. T.

BADDELEY, SIR VINCENT W., K.C.B.

BROCK, VICE-ADMIRAL SIR OSMOND DE B., K.C.B., K.C.M.G., K.C.V.O.

BROWNING, ADMIRAL SIR MONTAGUE E., G.C.M.G., K.C.B., M.V.O.

CALLENDER, GEOFFREY A. R.

CORBETT, SIR JULIAN S., F.S.A.

DARTMOUTH, THE EARL OF, P.C., K.C.B.

FIRTH, PROFESSOR C. H., LL.D., F.B.A.

GRAY, SIR ALBERT, K.C.B., K.C.

HALDANE, THE VISCOUNT, P.C., K.T., O.M., K.C.

KENYON, LIEUT.-COLONEL SIR FREDERIC G., K.C.B., P.B.A., D.Litt., LL.D.

KILBRACKEN, THE LORD, G.C.B.

LEYLAND, JOHN

MURRAY, SIR OSWYN A. R., K.C.B.

POLLARD, PROFESSOR A. F., D.Litt., F.B.A.

ROBINSON, COMMANDER CHARLES N., R.N.

RODD, SIR RENNELL, P.C., G.C.V.O., K.C.M.G.

ROSE, PROFESSOR J. HOLLAND, D.Litt.

ROUSE, W. H. D., D.Litt., F.R.G.S., M.R.A.S.

WESTER WEMYSS, ADMIRAL OF THE FLEET LORD, G.C.B., C.M.G., M.V.O., D.C.L.

WHITE, CAPTAIN JOHN BELL, C.B.E., R.N.R.

SECRETARY

W. G. PERRIN, Admiralty, S.W.

HON. TREASURER

SIR W. GRAHAM GREENE, K.C.B.

The Council of the Navy Records Society wish it to be distinctly understood that they are not answerable for any opinions or observations that may appear in the Society's publications. For these the responsibility rests entirely with the Editors of the several works.

CONTENTS

OF

THE SECOND VOLUME

PAGE

'Of the Beginnings, Practices, and Suppression of Pirates'

(i) Introduction and Bibliography . . . 3

(ii) 'Of the Beginnings, Practices, and Suppression of Pirates' 9

'A Short Discourse, or Proposition, concerning the French Fishing upon the Sowe' 53

'The Seaman's Dictionary'

(i) Introduction and Bibliography . . . 69

(ii) 'The Seaman's Dictionary' . . . 83

Documents relating to Mainwaring's Negotiations on behalf of the Venetian Republic . . 263

'An Estimate for Constant Guard of the Narrow Seas' 274

Jean Chevalier's Sketch of Sir Henry Mainwaring 276

Gentlemen and Tarpaulin Commanders . . . 279

Note on the Family of Sir George Mainwaring of Ightfield 282

OF THE BEGINNINGS, PRACTICES, AND SUPPRESSION OF PIRATES

INTRODUCTION AND BIBLIOGRAPHY

THE copy of Sir Henry Mainwaring's discourse which was presented to James I is now among the Royal Manuscripts in the British Museum. The manuscript, which is not holograph, is a small quarto of forty-eight pages. The handwriting is a particularly good specimen of the Italian script of the period, and the first words in each chapter are illuminated in gold. There is no title-page, but following the dedication to James I, is, 'Of the Beginnings, Practices, and Suppression of Pirates.' The date of its composition has been assigned to 1617,[1] but from a statement in the dedication it may be assumed that it was partly written in 1616. Before presentation to the King it was evidently circulated among some of the leading personages of the day, and at the suggestion of one of them, possibly the Lord Admiral, Nottingham, it was presented to James I by Mainwaring in 1618 as a thank-offering for his own pardon.

The information it contained was valuable and unique, and it is not improbable that Mainwaring's plans for the suppression of piracy on the Barbary coast may have persuaded James to despatch the expedition to Algiers in 1620.

[1] *United Service Magazine*, Nov. 1913.

At any rate the information was opportune, for during the years 1618–20 English spies were busy surveying and contriving to bring back plans of the harbours and forts of Algiers and Tunis.[1]

In accordance with the rules of the Society, the spelling of the original manuscript has been modernized, the contractions extended, and where necessary the punctuation has been altered. The pagination of the original is shown between brackets ( ). Besides the copy in the Royal Manuscripts, several other manuscript copies are in existence, and a bibliography of them is here given. Some of these lack the dedication to the King, and others substitute for the title the following description of the contents : 'A Treatise of Piracy, discovering in what Ports, Havens, and Creeks, all alongst the Turkish and Spanish coasts Pirates may sell their goods safely, have victuals, good refreshing and watering, and in what not ; with the manner of their Sailing and usual places of abode at all seasons of the year, with advice how to prevent and surprise them.'

List of other MS. copies, with their various repositories.

British Museum, Sloane MSS. 1010.

'A Treatise of Pyracie, discoveringe in what Ports, Havens, and Creeks alongst the Turkish and Spanish Coasts Pyrates may sell theire goods safely, have victualls, good refreshinge and wateringe, and in what not ; with the manner of theire Saylinge and usuall places of aboad at

[1] *Cal. S.P. Venice*, 1617–19, p. 230 ; 1619–21, pref. lv.

all seasons of the yeare; with advise how to prevent and surprise them: written by Sir Henrie Mainwaringe, Knight, and by him presented unto King James.' This copy, which is in splendid preservation, consists of twenty folios (*i.e.*, forty pages), but has not the dedication. Begins: 'Daielie experience' etc. and ends: '*Deliberare lente, quod decreveris, constanter urge.*'

British Museum, Cottonian MSS. Otho E. viii.

In folio, bound up with other manuscripts, and slightly damaged by fire, each folio being remounted.[1] Folios 299–316 comprise the 'Discourse of Pirats.' It is in a contemporary hand, not unlike that of Mainwaring, and has the dedication to James I, but is unsigned. All that remains of the title is the word 'Piratts.' Then follows: 'The purpose of this discourse,' and the contents of the chapters, which are unnumbered. Begins: 'Dailie experience' etc. and ends: 'calle anything past in question.'

British Museum, Harleian MSS. 2204, ff. 148-166.

'A Treatise of Piracie; discoveringe in what Ports, Havens, & Creeks, all alonge the Turkishe & Spanische Coasts, Pirates maie sell their Goods safelie: have Victualls, good Refreshinge & Wateringe; and, in what not. With the manner of their saylinge, & usuall Places of aboad at all Seasons of the Yeare; and advise how to prevent & surprise them. Written by Sir Henerie Mainwaringe, Kt., & by him presented unto King James.' In folio, evidently

[1] The Cottonian MSS. were damaged in the fire at Ashburnham House, October 23, 1731.

a contemporary transcript. It has not the dedication, and after the title, commences: 'Daylie experience' etc.

MSS. in the Library of the University of Cambridge.[1]

'A Discourse written by Sir Henrie Manwairing; and by him presented to the King's Majestie, A° 1618: wherein are discovered the beginnings and proceedings of the Pyrats, who nowe so much infest the Seas: Together with his advise and direction how to surprise and suppresse them.' This copy consists of 26 folios, the 'Discourse' occupying folios 1–19, the rest blank. Begins: 'Dailie experience' etc., and ends: '*deliberare lente; quod decreveris, constanter urge.* This copy belonged to John Moore, Bishop of Norwich, and afterwards of Ely. The library which he collected was famous throughout Europe, and at his death (1714) the books (29,000), and manuscripts (1790), were sold to George I for 6000 guineas; his Majesty afterwards presenting them to Cambridge University.[2]

Bodleian Library, Tanner MSS. 121, ff. 107-17.

'A treatise of piracy, discovering in what ports, havens and creeks, along the Turkish and Spanish coasts, pirates may sell their goods safely etc., with the manner of their sailing and usual places of abode, with advice how to prevent and surprise them, written by Sir Hen. Manweringe and by him presented to King James.' (In Folio.)

[1] *Cat. of MSS.* preserved in the library of University of Cambridge, 1858, iii. 475.

[2] See Bernard, *Cat. MSS. Angliae*, ii. 367.

Hatton MSS. belonging to The Rt. Hon. The Earl of Winchilsea and Nottingham.

'Sir Henry Manwayring's discourse on Pirates.' [1]

Trinity College, Dublin.[2]

'Capt. Manwaring, his Discourse on Piracy.'

Manuscripts of Sir Harry Mainwaring, Bart.

'A discourse written by Sir Henry Manwaringe, and by him presented to the Kinges Matie Ano Dni. 1618, wherein are discovered the beginnings, practises and Proceedings of the Pyrates, who now so much infest the Seas, together with his Advice and direction how to surprise and suppress them.' In folio, bound in a parchment cover with two other manuscripts. This transcript, which is early seventeenth century, is badly done and imperfect. The dedication to the King ends at *Pulchrum Scelus*.

Hodgkin MSS.

A copy was formerly in the possession of the late J. Eliot Hodgkin, and was afterwards sold at Sothebys.[3] It was found by Mr. Hodgkin among some odds and ends of fishing tackle in a shop in the Waterloo Road, and he records that in the ordinary course it would have probably gone to the mills.[4] It is entitled :—'A Discourse written by Sr Henrie Mainwaringe Knight, and by

[1] *Hist. MSS. Comm. Rep.*, i. p. 43.
[2] *Cat. of MSS.* in the library of Trinity College, 1900. No. 861 (15).
[3] In May 1914.
[4] Note by the owner at the end of the volume.

him presented unto Kinge James Año dñi 1618, wherein are discovered the beginninges and proceedinges of Pyrats, wth theire usuall places of aboad at all tymes of the yeare, together with advise and direction for surprisinge and suppressinge of them.' Contemporary manuscript on paper (48 pp.), small folio, and neatly written. Begins: 'Dailie experience,' and ends: '*constanter urge.*'

OF THE BEGINNINGS, PRACTICES, AND SUPPRESSION OF PIRATES

[British Museum, *Bibl. Regia*, 17A, xlvii.]

To my most Gracious Sovereign, that represents the King of Heaven, whose mercy is above all his works.

Give leave I humbly beseech your Grace to me your own Creature (being newly recreated and restored by your gracious Pardon to that life which was forfeited to the Law) humbly to offer with a faithful, loyal, obedient and a thankful heart to your Majesty's favour, this, as some oblation for my offences, and a perfect sign of the true and hearty acknowledgment I make of your Highness' grace unto me. I am so far from justifying my own errors, that I can scarce afford them those reasonable excuses, which might be perhaps allowable in any other man.

As that I fell not purposely but by mischance into those courses; being in them, ever strove to do all the service I could to this State, and the merchants. As that, where there were 30 sail of

Pirates in Mamora,[1] I suffered none to go in or out, but with condition not to disturb any of your Majesty's subjects. I made peace with Sallee,[2] (2) which took many small ships, and bought out the prisoners: Have cut off three Turks men of war, the one of them had been as high in Thames as Leigh:[3] Set free the slaves and captives, and taken Englishmen's ships and goods from the Turks, and re-delivered them to the true owners: Have wafted[4] them from other men-of-war: Made peace with Tunis for all your Highness' subjects; and at the same time bought as many English slaves as cost me near 5000 ducats: Disheartened the Flemings from venturing to Newfoundland, by which they would quickly have overthrown the west of England:[5] Been the occasion that all English ships throughout all Christendom have been better freighted than before: Lastly, I have abstained from doing hurt to any of your Majesty's subjects, where by it I might have enriched myself more than £100,000, being that most of the best ships that trade for the Straits, and the coast of Spain and Barbary, as also divers others have come through my fingers. All these things the merchants of London, had justified under their hands with purpose to have shown it to your Highness in favour of me, but I feared I should rather (3) have been troublesome than accepted.

[1] Mehedia, about twenty miles N. of Sallee on the west coast of Morocco, at the mouth of the R. Sebu.

[2] MS. Sally.

[3] Leigh-on-Sea. MS. Lee. For this incident see also *Carew Letters*, p. 51.

[4] Convoyed.

[5] The Newfoundland fishery was principally carried on by fishermen from the western ports.

These truths though they cannot expiate yet they might extenuate the offence in another man, and may be called *Pulchrum Scelus*,[1] but in me so little, that did not the laws of Christianity and Nature interdict me I could easily be evidence, jury, judge, and executioner to myself. I trust your Majesty will not undervalue, but rather esteem me the more for having refused the free and voluntary pardons with proffers of good entertainment from other Princes, as namely the Duke of Medina[2] sent to me, that if I would deliver up Mamora[3] to the King of Spain, that I should have a great sum of money for me and my company, with a free pardon to enjoy all our ships and goods, and good entertainment if I would command in the King's ships.

The Duke of Savoy sent me my pardon. The Duke of Florence sent me my pardon, and gave leave to the ship to wait on me till I was willing to come in, which did so for a great while. The Dey of Tunis eat bread and salt and swore by his head (which is the greatest asseveration they use) that if I would stay with him (4) he would divide his estate equally with me, and never urge me to turn Turk, but give me leave to depart whensoever it should please your Majesty to be so gracious as to pardon me. These I know of mine own knowledge and so do many more. And since my coming home I have heard that the Conde of Porto Legro[4] after I had put off

[1] An honourable crime.

[2] El Duque de Medina-Sidonia.

[3] Mamora was captured by Fajardo and placed under the Spanish crown in 1614, see vol. i. pp. 23–4.

[4] *Sic* in MS., probably Juan de Silva, Conde de Portalegre, whose correspondence is in *Col. de Docs. inéditos para la hist. de España*, 39, 40, 43.

5 sail of the King of Spain's men of war [1] (being in fight with them all midsummer day last) myself having but 2 he offered that if any would go out and advertise me he would get me my pardon, and give me 20,000 ducats a year, to go General of that Squadron. Monsieur Manti [2] was met in the Straits with my protection from the Duke of Guise. I forbear to speak how willing the Spanish Ambassador [3] seemed to my brother,[4] to have me serve his Master at that time when he moved him for his consent to my pardon. By these it may appear to your Majesty that I did not labour my Pardon as one being banished from all Christian Princes, but as a dutiful subject preferring the service of my country and my particular obedience to (5) your Royal person before my own ends. In this respect I doubt not but your Majesty hath many malicious informations of me from other States, who being themselves refused would by disgracing me in your Majesty's favour, make me incapable of it. But let me humbly beseech your Majesty, that since life and honour are *Individui Comites* in every honestly resolved spirit, and that your gracious favour hath restored the one, so likewise to do the other, by your favourable acceptance of me, and that they may

[1] See Vol. I. p. 26. The date of the contest was 1615, which would make it appear that the manuscript was partly written, if not actually finished, in 1616. On the copy among the MSS. of Sir Harry Mainwaring, Bart., it is stated to have been presented to James I in 1618.

[2] M. de Manti was a native of Marseilles, and is described 'as a servant of the Duke of Guise, and a man of note in navigation and similar matters' (*S.P. Venice*, 1617–19, p. 405).

[3] El Conde de Gondomar.

[4] Probably Sir Arthur Mainwaring.

either live or die together by your Majesty's command. Though my course I confess were not honourable, yet since it was ordained to be unfortunate I am glad 'twas in a way which hath somewhat enabled me to do your Majesty service if occasion were given.[1] This small discourse, of a boisterous argument, and as roughly handled (as also so unworthy your Majesty's eye) of myself I durst not have (6) presented but at the commandment of one of your Majesty's most worthy servants.

Your Majesty's new Creature,
HENRY MAINWARING.[2]

Of the Beginnings, Practices, and Suppression of Pirates.

The purpose of this discourse consists in showing:

Their beginnings, and how they relieve themselves within your Majesty's Dominions. *Cap. I.*

The ground of opinion which encourages men in this course of Piracy; and of those are called Perforst-men. *Cap. II.*

How they use to work at Sea. *Cap. III.*

Where and what times they use to be where they must water, ballast, wood, trim their ships, and sell their goods. *Cap. IV.*

A means as well to prevent as suppress them. *Cap. V.*

[1] As Mr. Oppenheim remarks, 'the English rover was more than half patriot; if he injured English commerce, he did infinitely more hurt to that of France and Spain' (*Admin. of R.N.*, 177).

[2] MS. 'Maynnaringe'—evidently the copyists' error for 'Maynwaringe.'

Cap. I.

Daily experience proves it to be undoubtedly true, that English Pirates do first arm and horse themselves within your Highness' Dominions, as well England (8) as Ireland, which the easier happens by reason that there are divers places (and chiefly such as are not capable of great shipping), that have no command,[1] as also by the negligence of the Owners of such small Ships, that having no force to defend them keep ill watch, and leave their Sails aboard; wherein those Officers cannot be excused, that do not discreetly look into the disposition and resorts of such seamen as either are within, or near their Harbours. So that it is commonly seen, that a very few, though but to the number of 10 or 12, do easily get out, and being assured of more Company wheresoever they shall touch upon the Coast, (by reason that the common sort of seamen are so generally necessitous and discontented) they make no doubt but when they have somewhat increased their number, to better their Ship by going into the Trade of Brittany[2] where they meet continually with small Frenchmen, Pinks,[3] and Brawmes[4] of Hoorn,[5] which being slightly manned are easily surprised. These commonly go

[1] I.e. are not dominated by any fort or other military establishment.

[2] MS. Brittaine. The 'Trade' was the name given to that part of the sea between Ushant and Brest which is now known as the Passage de l'Iroise (see Laughton, *State Papers rel. to Spanish Armada*, i. 196 n; ii. 348).

[3] A pink was a small flat-bottomed vessel, having a very narrow stern, and used principally for coasting and fishing.

[4] Prahm or Praam, a small coasting vessel.

[5] MS. Horne. Twenty miles N.N.E. of Amsterdam.

well, and are of good burthen, as between 180 and 200 Ton; and then by (9) the countenance of such a ship well manned they quickly overbear any small Ship with a few great Ordnance, and so by little and little reinforce themselves, to be able to encounter with a good Ship.[1] But if they chance to put out of the North part of these Coasts, then they fit themselves in the North Seas. And to give your Highness a particular instance and taste how these men may and do easily embark themselves: When small Pinks and little vessels do stop below Gravesend, in Tilbury Hope, or against Queenborough,[2] the wind being westerly, they may, with one or two wherries in the night, go aboard and enter them, and put to sea before a wind, so that they cannot be stayed or prevented. In this manner, or the like, for the most part they begin both in England and Ireland; and although these things happen more often in England than Ireland, by reason there is more plenty of Ports and Shipping, as also more abundance of Seamen, yet in proportion Ireland doth much exceed it, for it may be well called the Nursery

[1] In *Fortune by Land and Sea*, a tragic comedy by T. Heywood and W. Rowley, published 1655, but written during the beginning of the 17th century, occurs:

> When first we took you to our fellowship,
> We had a poor bark of some fifteen ton,
> And that was all our riches. But since then
> We have took many a rich prize from Spain,
> And got a gallant vessel stoutly mann'd,
> And well provided of ordnance and small shot,
> Of men and ammunition, that we now
> Dare cope with any carrack that does trade
> For Spain.
>
> (Act IV, Sc. ii., On board a privateer.)

[2] MS. Quinborow.

and Storehouse of Pirates,[1] in regard (10) of the general good entertainment they receive there; supply of victuals and men which continually repair thither out of England to meet with Pirates.[2] As also, for that they have as good or rather better intelligence where your Majesty's Ships are, than contrariwise they shall have of the Pirates. In regard of the benefit the Country receives by the one, and the prejudice, or incumber as they count it, of the other. Unto which must also be added the conveniency of the place, being that the South, the West, and the North Coasts, are so full of places and Harbours without command, that a Pirate being of any reasonable force, may do what he listeth. Besides that, many of that Nation are scarce so well reduced to any civil jurisdiction, as to make a conscience of trading with them.

Myself saw the experience of these things, for being in the North-west,[3] where few Pirates come, and not understanding but hoping of your Highness' gracious Pardon, being for my safety bound to stand off to Sea, till I might hear a happy answer from my friends, to whom I then sent (11) into England, I had near 60 new men come into

[1] Sir W. Monson spoke of Broadhaven, a land-locked haven between Erris Head and Benwee Head on the west coast, as being the 'well-head of all pirates' (*Naval Tracts N.R.S.*, xliii. p. 59).

[2] The great recourse of pirates to the coasts of Ireland was believed to be due to the want of a statute such as that of 28 Hen. VIII in England (*Cap XV.* For the punishment of pirates and robbers of the sea), which allowed their trial by commission. From time to time all pirates in Ireland whose conduct deserved death had to be sent over to Barnstaple, Bristol, or West Cheshire (*S.P.*, Jas. I. Ireland, 1608-10, pp. 105–6).

[3] I.e. of Ireland.

me, and received letters from the Southwards that here were divers expected, that I would touch in those parts to take them in. And generally a Pirate may in all those parts trim his Ships, without affront from the Country, although it be in such places as they may well, either surprise or disappoint them, as also victual themselves in this manner [1] :

The Country people will not openly bring their victuals, nor in audience of any seem to harken to any such motion, yet privately with the Captain will appoint where he shall in the night find so many Beeves [2] or other refreshments as he shall need, who (that he may seem to take this away perforce) must land some small shot, and fetch them ; with like cleanly [3] conveyance, and secrecy, he must land the goods or money in exchange, which by custom, they expect must be 2 or 3 times the value. In the same sort shall he have all kind of Munition, or ship's provision, if it be there to be had. I say not that this is done by open allowance, or toleration of the chief Governors and Commanders, yet I may well (12) imagine by proportion of other things in these days there may be some connivance where there is a fellow-feeling.

[1] On August 22, 1609, Sir Richard Moryson wrote from Youghal that the continued repair of pirates to the west coast of that province was in consequence of the remoteness of the place, the wildness of the people, and their own strength and wealth both to command and entice relief. There were, he reported, 11 pirate ships with 1000 men there then, and that he was forced to forbear any prosecution of them (*S.P. Ireland*, 1608–10, pp. 277–8. This calendar is teeming with accounts of piracy).

[2] Oxen.

[3] MS. ' clenly '—adroit, dexterous. For an incident of this nature see *N.R.S.*, xliii. 60.

Cap. II.

The common sort of seamen, even those that willingly and wilfully put themselves into these courses, are greatly emboldened by reason of a received opinion and custom that is here for the most part used, that none but the Captain, Master, and it may be some few of the principal of the Company shall be put to death.[1] Now since ordinarily there is not any mean used betwixt death and liberty, to punish them, unless it be a little lazy imprisonment, which is rather a charge to your Highness, than any affliction to them, since their whole life for the most part is spent but in a running Prison, and for that it may be thought too much effusion of blood, to take away the lives of so many, as may perchance be found together in such an action (13), as also for that the State may hereafter want such men, who commonly are the most daring and serviceable in war of all those kind of people[2]: and on the contrary, to set them at liberty is but licensing them to enter into the same way again, for that the most part of them will never be reclaimed, as appears plainly by those who have been heretofore pardoned: me thinketh (under correction of your Majesty's better judgement) it were no ill policy for this State, to make them

[1] Mr. Oppenheim points out, that of the many pirate captains whose names continually recur in the *State Papers* of the reign of Elizabeth, not one is known to have been executed (*Adm. of R.N.*, p. 179).

[2] Paul Hentzner, who travelled in England towards the end of Elizabeth's reign, wrote that the English were 'good sailors and better pirates' (*Travels*, 1797 ed., p. 63). Two famous pirates, Sir John Ferne and Walsingham, were employed under Mansell in the Algiers Expedition of 1620.

Slaves, in the nature of Galley-Slaves ;[1] whereof though now we have no use, yet for guarding of the Coast, there might be vessels of great force contrived, far more serviceable than any we have, especially for the Summer-time, to go with Sail and Oars : and in the meantime, they might be employed to the advancement of many good works, with small charge to your Majesty, as about the Navy ; scouring of barred Havens, which especially on the East coast are choked up, to the great prejudice of the whole Kingdom, and almost the utter impoverishing of the particular places, and Inhabitants there ; repairing of your Highness' Castles (14) and Forts on the Sea-Coast, which myself have since my coming, seen and perceived to be miserably ruined and decayed ; and divers such like, which men of better judgement and design than myself would easily invent. And this course, as it may be a means to save many their Souls, by giving them a long time of Repentance, so would it terrify and deter them, more than the assurance of Death itself. Myself have seen them in fight, more willingly expose themselves to a present and certain death, than to a doubtful and long slavery. Other Christian Princes use this kind of punishment and so convert it to a public

[1] By an Act of 1597–8 (39 Eliz., cap. 4), for punishing 'rogues, vagabonds and sturdy beggars,' among which category were included 'all seafaring men pretending losses of their shippes or goods on the sea going about the Country begging,' it was enacted that all who would not reform, would be banished out of the Realm, or 'otherwise be judged perpetually to the Galleys of this Realm.' Sir William Monson was of the opinion that the minimum period of detention in the galleys should be for seven years (*N.R.S.*, xlv. 107).

profit, amongst whom it is observable, that as many as make slaves of offenders, have not any Pirates of their Nation.[1]

Many Pirates, especially those who are in small ships, a few in number, and that have been out but a while, so that little notice is had of them, having gotten some purchase, do use to clear themselves, by running their Ships ashore, or else by sinking them; and so saving themselves in Boats, whereby they are the less noted, and that (15) in some parts far from the places of their abodes, as also most distant from the Coast where they made purchase. In this course their opinion is that either they go clear, and then they have what they desire, or if they be taken it is but compounding with the Vice-Admirals or some under Officers who (because there is no man to give evidence against them, being that the parties injured may have no notice of their apprehending) may very colourably discharge them. And although this be many times used and that chiefly in Ireland, yet I know there are sufficient Laws, and institutions to prohibit and punish them. And therefore the error of this is nothing but abuse by the Officers, which by a strict and severe course taken by your Highness for the execution of Justice might easily be reformed.

By reason that your Highness did grant a

[1] Cosimo of Tuscany had a short way with proved pirates. In November 1614 two English ships laden with spoil arrived in Leghorn. Suspecting that the plunder came from Christians and not from Turks, he had the crews arrested. On enquiry, his suspicions were found to be well grounded, and he had two of the ringleaders 'hanged, quartered and gibbeted as an example,' and sent the rest to the galleys for life (*S.P. Venice*, 1613–15, xliv).

Pardon to one Peter Cason [1] who betrayed the Concord of London, and one other to a Dutchman named Peeters,[2] who took another Ship of London, with condition that they should give satisfaction to the English; they do generally assure themselves of a Pardon, if they can (16) but take a good English Ship and be able to return or satisfy their losses. And to this they usually add, that if they can get £1000 or two, they doubt not but to find friends to get their Pardons for them. They have also a conceit that there must needs be wars with Spain within a few years, and then they think they shall have a general Pardon. Lastly they say, that if there be no hope of Pardon here, yet Leghorn,[3] and Villefranche [4] are free for them, and thither they go.

How to reform the abuse of those privileges so contrary to civil society and common comers

[1] Peter Easton or Eston. For an account of this redoubtable pirate, see Vol. I. pp. 21–23. On November 26, 1612, Easton was re-granted a pardon on condition that he restored the *Concord*, and the goods that were in it, also the *Bonaventure*. The pardon was renewed owing to a former pardon never reaching Easton, he being near Newfoundland (*S.P. Dom.*, Jas. I, lxxi. 43).

[2] A pardon was granted to Peter Peeters on November 28, 1610, for piracy on a vessel belonging to Edward Cashel, of Dundalk, Ireland (*S.P. Dom.*, Jas. I, lviii. 42).

[3] As early as August 1609, the famous pirate captain, John Ward, was invited to Leghorn, and in September 1611 the Grand Duke was offering free quarters to the pirates if they came to Leghorn, and promised them good treatment (*S.P. Venice*, 1609, p. 309; 1610–13, pp. 206–7).

[4] MS. Villa-Franck. In March 1613 the Duke of Savoy issued a proclamation making Nice and Villefranche free ports. No matter what were their crimes, all and sundry were offered asylum and safety. Bonded warehouses were also opened, where, on payment of a small sum, they could store their goods! (*S.P. Venice*, 1610–13, p. 503).

betwixt Christian States I know not, except either by treaty with them to abolish such ill customs, or by making the cause equal, by granting free Ports for offenders against them in like nature, or by granting Letters of Reprisal to such as by the protection of those places, have their goods unlawfully detained from them. One thing I have not found to be well observed by any man, and yet is a great occasion to encourage men both to continue, and enter into those actions (17), is the misunderstanding of such as are called Perforst-men, by which is commonly meant, such as are taken out of Ships at Sea, so that it is intended that they are taken away against their wills. But that your Highness may the better understand and judge of such men, I must report truly that when I have had near six or seven hundred men at one time, and for the most part all taken out of Ships, I know not that I had three Perforst-men, in all my Company, neither of all that I had at Sea, was any taken, but in this or the like sort. Having fetched up and commanded a Ship, some of the Merchants-men would come to me, or to some of my Captains and Officers, to tell me they were desirous to serve me, but they durst not seem willing, least they should lose their wages, which they had contracted for with their Merchants; as also that if by any occasion they should come home to their Country, or be taken by any other Princes, it would be a benefit to them, and no hurt to me, to have them esteemed Perforst-men. In which respect I being desirous to have men serve me willingly and cheerfully, (18) would give them a note under my hand to that purpose, and send men aboard to seem to take them away perforce. These men by such

slender attestations are rather welcomed home, than any way molested or troubled, unless by mischance some under officer of the Admiralty light upon them, and pillage them of their goods. The inconvenience and mischief whereof is this: that such men knowing themselves to be privileged are more violent, head-strong, and mutinous, than any of the old Crew, either to commit any outrage upon their own Countrymen, or exercise cruelty upon others, as also the most unwilling men to be reduced home, till they have struck up a hand, and then they apprehend the first occasion they can to get ashore in any your Majesty's Dominions, where concealing their wealth they offer themselves to the next officers or Justices, complaining of the injury they have received in being so long detained by force, and so they are commonly not molested but relieved. The way in this case neither to punish the innocent, nor to let the guilty escape, is (in my conceit) to have all such committed, till a just proof may be made (19) whether they have received shares or pillage of the goods or not, more than to supply their necessary wants and wearing clothes; if they have, they are then absolutely as willing and as guilty as is the Commander. For I never knew seamen so violently liberal, as to force men to receive money, nor any so courteous and so conscionable as to refuse what was offered them.

Cap. III.

In their working they usually do thus: a little before day they take in all their sails, and lie a-hull, till they can make what ships are about them; and accordingly direct their course, so as

they may seem to such ships as they see to be Merchantmen bound upon their course. If they be a fleet, then they disperse themselves a little before day, some league or thereabouts asunder, and seeing no ships do most commonly clap close by a wind to seem as Plyers.[1]

If any ships stand in after them, they heave[2] out all the sail they can make, and hang out drags to hinder (20) their going, that so the other that stand with them might imagine they were afraid and yet they shall fetch them up.[3]

They keep their tops continually manned, and have signs to each other when to chase, when to give over, where to meet, and how to know each other, if they see each other afar off. In Chase they seldom use any Ordnance, but desire as soon as they can, to come a board and board;[4] by which course he shall more dishearten the Merchant and spare his own men. They

[1] To ply = to beat up against a wind, to work to windward.

[2] This word was originally 'have,' an 'e' has been added on top of the word.

[3] This appears to have been a favourite stratagem, which was adopted also by the King's ships. Sir William Monson states that 'a ship that is chased and desires to show fear, thinking to draw her that chases into her clutches, must counterfeit and work as though she were distressed, or lie like a wreck into the sea; she must cast drags, hogsheads, and other things overboard, to hinder her way' (*Naval Tracts*, *N.R.S.* xlvii. p. 142). On March 1, 1579, Drake, in the *Golden Hind*, while off Cape Francisco, fell in with the Spanish ship *Cacafuego*. 'To take in sail would be to arouse the suspicions of the chase.' Drake therefore hit on the ingenious idea 'of trailing at his stern empty wine jars, whereby his speed was reduced, and the chase deceived as to his power of sailing' (Corbett, *Drake*, i. 274). See also Sir Kenelm Digby's *Voyage to the Mediterranean* (*Camden Society*, 96, p. 82).

[4] When two ships touch.

commonly show such colours as are most proper to their Ships, which are for the most part Flemish bottoms, if they can get them, in regard that generally they go well, are roomy Ships, floaty,[1] and of small charge.

Cap. IV.

This part may seem somewhat tedious to your Highness in regard that I imagine your Majesty hath not been much used to the (21) Sea, but I thought good to set it down, that it might serve a little to advise your Majesty (according to my small understanding) what directions to give in Commissions, if there should be any purpose to employ Ships for the suppressing of Pirates.

Within the Straits of Gibraltar,[2] there is not any place for Pirates to resort to, but only Algiers and Tunis, where they may be fitted with all manner of provisions and to ride safely from the Christian forces; yet at Algiers their Ships are commonly betrayed from them and manned out by the Turks, after the proportion of 150 Turks to 20 English, yet the English in their persons are well used and duly paid their shares.[3] But at Tunis they are better people

[1] 'A floaty ship is a ship which draws but little water' (*vide* p. 149).

[2] MS. Giberalter.

[3] Lord Carew writing in 1616 records that, 'in the towne of Angire the Englishe are well enoughe intreated, but yf they be taken at sea, ether outward or homeward bound, they are esteemed good price without redemption. . . . To assure themselves of renegados, the Turkes are so carefull as in every shippe there is three Turkes for one renegado' (Carew: *Letters to Sir T. Roe*, p. 61).

and hold their words more justly, especially since Uzuff Dye [1] commanded, who is now there, and a very just man of his word.

Those of Algiers do for the most part come without the Straits, or if they stay in the Straits, they lie either off Cape de Gata,[2] Cape de Palos [3] or Cape San Martin,[4] and seldom go lower towards the bottom. Going in of the Straits,[5] they keep close a (22) board the Barbary shore; but going out on the Christian. At Tetuan,[6] the first town on the Barbary side going in, a Pirate may water well, have good refreshing, buy store of powder (which is for the most part brought in by English and Flemish Merchants) and sell their goods well which is quickly landed and dispatched by reason of the Boats of the town, but here is no command [7] but to ride upon their guard; they ride also in foul ground and must perforce put to Sea if the Levant [8] come here; the people are very just and trusty.

At Tlemçen [9] they may water, and ballast, sell goods, and have some refreshing, but the town is 30 miles into the Country, so that things are long a-coming and the Road very dangerous, being in the bottom of a deep Bay, Cape

[1] *I.e.* Yusuf, Dey of Tunis.

[2] MS. Capp. Gatt; seventeen miles E.S.E. of Almeria.

[3] MS. Cape Paule; eighteen miles E. by N. of Carthagena.

[4] MS. Cape Martine; Spain, ten miles S.E. of Denia.

[5] 'The Straights' was the general term for the whole of the Mediterranean: the 'Straights mouth' was the western, and the 'bottom of the Straights,' the eastern part. (*Oppenheim*, p. 343 note.)

[6] MS. Tituan. On the Morocco coast, thirty-one miles S.E. by E. of Tangier.

[7] No fort to protect them.

[8] *I.e.* East Wind blowing up the Mediterranean.

[9] MS. Tremezeen.

Falcon,[1] bearing North-east, and Cape Tres Forcas [2] bearing West-north-west; the people here are very treacherous.

At Formentera [3] by Iviza [4] is water, wood, and ballast, but nothing else, being no inhabitants. They must shift Roads as the winds are either Easterly or Westerly, which they must do by putting through betwixt the Islands (23) wherein the best of the channel is 3 fathom water, and they ride in 5 or 6.

At Cape De Gata [5] on the Christian shore they may water, but if they be discovered for Pirates they will be put off.

At Bona [6] and Bougie [7] which are under the command of those of Algiers, Pirates may be very well refreshed with victual, water, and bread, and also sell goods well, and these are good Roads for Pirates, but they dare not trade with any unless they bring with them the Letters of Algiers; here they may ride under command of the Fort, and the people are very just.

Those of Tunis seldom come out of the Straits, but for the most part do lie off of St. Peters [8] by Sardinia, or Cape Passaro [9] in Sicily, or

[1] MS. Faulcon. N.W. Coast of Algeria.

[2] MS. Tres Forkes. On the N.E. point of Ras ed Deir, N. coast of Morocco.

[3] MS. Formetero. One of the Balearic Islands.

[4] MS. Euersay. Sir W. Penn spelt it Ivessy (*Memorials*, i. 332); Admiral Badiley in 1652 wrote Iversey (Spalding, *Life of Badiley*, p. 71).

[5] MS. Degatt. S.E. Spain.

[6] Bône is a fortified seaport town whose harbour is considered the safest on the Algerian coast.

[7] MS. Bogee. One hundred and twelve miles E. of Algiers. The roadstead is deep and sheltered.

[8] San Pietro, island off the S.W. point of Sardinia.

[9] MS. Cape Passer in Sicillia. Extreme S.E. of Sicily.

betwixt Cape Angelo,[1] and Zante,[2] yet here they are somewhat fearful of the Venetian Galligrosses,[3] or else betwixt Cape Salamon [4] in Candy and Scarponto,[5] for ships bound from the bottom, or Gozzo [6] by Candy and seldom go any lower.

(24) At St. Peters they may water and at Lampedusa,[7] and generally in all the Greek Islands they shall have good quarter, and great store of Hogs, and they are good people especially at Milo.[8]

At Rhodes [9] and Cyprus [10] if they bring the

[1] Cape Sant' Angelo, S.E. extremity of the Morea.

[2] One of the Ionian Islands.

[3] Galee Grosse, worked with four sails, and sometimes 100 oars. Some of them were 115 ft. in length, and had turrets for the protection of the soldiers (Weil: *Navy of Venice*, p. 51).

[4] MS. Cape Solomon. East coast of Crete.

[5] Island in S.E. Aegean Sea.

[6] MS. Goza. Island in the Mediterranean to the S.W. of Crete.

[7] MS. Lampadoza. Island in the Mediterranean, midway between Malta and the coast of Tunis. Sir Kenelm Digby, who visited Lampedusa in 1628, records that on the island 'dwell no persons . . . but there is a lamp continually burning. The Turkes beare a great reverence to the place, and allwayes leave oyle or bread or something behind them (through devotion) but they know not for whom; and it hath prooved very fatall to carry away anything from thence. . . . onely one may safely water there' (*Voyage to Mediterranean*, p. 72). The scene of Shakespeare's *Tempest* is supposed to be laid on the Island (see Hunter: *Writings of Shakespeare*, i. 158–185).

[8] For an interesting account of the corsairs who used the Greek Islands, see Roberts Narrative in Hackes *Collection of Voyages*, 1699, pp. 1–53, where their manner of victualling etc., is fully described, somewhat similar to the account given by Mainwaring. A favourite ship employed by them was the *Feleucca* (*i.e.* Felucca), rowed with twelve oars, which was so small that they were enabled to hide it 'in a hole.'

[9] MS. Roades. [10] MS. Cipres.

letters of Tunis or Algiers they shall be well used, but generally in all these places it is not safe trusting them.

At Tripoli in Barbary they shall be entertained and refreshed, and ride in command; but these are dangerous people, and the entrance bad for ships of any burthen, so that few dare come thither.

Sowsey [1] is under the command of Tunis, and a good harbour there. Men shall be well dealt withal that have the Letters of Tunis, and there they ride safe under a Castle.

Porto Farina [2] is 7 leagues from Cape Carthage, and there is very good watering, and a good place to careen in, being Land-locked, yet the North-west winds are dangerous, coming in Perries [3] down the high hills; they can (25) have nothing here without leave from Tunis but water.

Tunis is but an open Road, and the Castle cannot warrant the ships; it is a good Road all over the Bay in 5, 6, and 7 fathom, so that one or two Ships of force may keep them all in, where it is easy to fire all the Turks shipping in regard that when any Christian force comes in, they will all forsake their Ships and run ashore.

Algiers hath a mould [4] within which Ships

[1] Apparently Susa, on the Gulf of Hammamet; 'command' being here used in the sense of 'dominion.'

[2] MS. Porto Feryn. In the Gulf of Tunis. At one time famous for its arsenal. It was the winter port of the Tunisian fleet. Blake gained one of his celebrated victories here on 4th April, 1655.

[3] Perry, a squall or contrary wind (*Halliwell's Dictionary*).

[4] The inner harbour of Algiers, originally built in 1518, consisted of a mole connecting the town with the rocks on which the lighthouse, built 1544, now stands. The citadel situated on the highest point of the city was defended by 200 guns.

ride and great store of singular good Ordnance, which commands the whole Road, which is very dangerous if the wind come Northerly, so that Ships cannot or dare not ride to keep them in. In Velez Malaga [1] there is no command, nor in Jabea-Roads,[2] and therefore they may take Ships at an Anchor. In Alicante [3] good Ships ride out far in the Road, and therefore there they may, the wind being landerly, take out a Ship, and in Cullera [4] they ride out of command.

(26) Generally not any Pirates do stir in the Straits from the beginning or middest of May till towards the last of September, unless it be with their Galleys or Frigates,[5] yet towards the middest of August those of Algiers will go out of the Straits, if they meet with a set Levant.

I purpose not to trouble your Highness with the business of these Seas much, or the means to suppress Pirates here, for that they lie more commodious for the bordering Princes to defend and suppress; yet before I come out of the Straits I think it fit to acquaint your Highness what unequal terms we hold with those of Tunis and Algiers, for although we have Merchants, Factors, Ledgers,[6] there, and a free trade with them, yet at Sea they will take our Merchants; only if they do not fight, they will not make slaves of them, nor keep their Ships, but their

[1] MS. Vealls Mallego. Fourteen miles E.N.E. of Malaga.

[2] MS. Shavia. Formerly Xavea, forty-five miles N.E. of Alicante.

[3] MS. Allicant.

[4] MS. Callery. Twenty-one miles S. of Valencia.

[5] MS. Foriggotts.

[6] *I.e.* Ligier; resident agent or consul.

goods they will. But I think that is rather in favour of themselves than in good will to us; for by that means the common sort of Mariners are (27) not so willing to fight for the Merchant goods. Though this be a great injustice, yet I think it is necessary to hold quarter with them, for if we should have Wars with Spain, there is no place for our Merchants that trade that way to relieve themselves in any distress betwixt Sicily and Gibraltar so convenient as those places.[1]

In all the Straits there is not any place to ground a Ship of any reasonable burthen, but they careen all, which is a mighty inconvenience to Pirates.

Without the Straits for the most part, all Pirates do resort to the coast of Spain and Portugal for purchase, and there according to the times of the year do lie off of one place or other; from the middest of February to the last of March, they commonly lie South and South-south-west of Cape St. Maries,[2] some 20 or 30 leagues off, for Indies men outward bound. And generally February, March, April, and May, they keep the coast of Spain, in which months those that look for Straits men homeward bound, lie (28) 20 Leagues off Cape St. Vincent west. Others

[1] On August 18, 1623, the Venetian Ambassador informed the Doge that 'the English merchants, following the example of the Dutch, have made a compact with the ever formidable pirates of Algiers, and for the greater security they have chosen a consul to reside at Algiers' (*S. P. Venice*, 1623–5, no. 115). The negotiations were carried on by Sir Thomas Roe at Constantinople (see *Roe Negotiations*, i. pp. 117–9, 139–41).

[2] Cape Santa Maria.

that want victuals, lie some 15 Leagues off the Rock,[1] or the Burlings [2] for Easterlings,[3] which come full of victuals for the Spanish Fleet, and bring also good store of copper, linen, and wearing stuffs; and betwixt that height [4] being 39 and 44 they are still in the way of Brazil men [5] both outward and homeward bound, which commonly are going and coming all the year long. When they lie off this coast they use commonly to stand in all night, and off all day, if the wind be to the Northwards of the North-west, as for the most part on those coasts it is in those months either Northerly, or Easterly, and then they come within 3 or 4 Leagues of the shore, but if the wind be westerly, then they stand further off.

Some will bring Cape St. Vincent south-east and east-south-east, somewhat betwixt 8 and 16 Leagues, for men bound about the Cape for San Lucar,[6] Cadiz,[7] or the Straits, but generally all those must be good Ships, and stout men-of-war, in regard that they lie in the common rut [8] of the King of Spain's men-of-war. (29) Other small men will it may be lie about the North Cape,[9] for small Gallego boats,[10] and Burtons,[11] which

[1] Cape Roca. Known to English sailors as the Rock of Lisbon.

[2] Berlengas or Burlings. A group of small islands off coast of Portugal.

[3] Ships of the Hanseatic or other Baltic ports, whose inhabitants were called Easterlings.

[4] Height and altitude were frequently used by the early navigators for latitude.

[5] MS. 'Brazeeli.' The yearly Spanish Brazil fleet.

[6] MS. St. Lucas. About twenty miles N. of Cadiz.

[7] MS. Cales.

[8] *I.e.* Route.

[9] Cape Finisterre.

[10] Ships of Galicia.

[11] Breton ships.

hall [1] the shore close aboard, especially if the wind be Easterly ; some who have the occasion to trim in Ireland in January and February will go to the Sound by the First of March, but there they cannot stay long by reason of the King of Denmark's Ships, but presently they return for Ireland, and trim, and so come for the Coast of Spain.

From the middest of May, till the middest of August, they are seldom on the coast, as well for that in those months there is least trading, as for that, in those fair seasons, the Spanish and Flemish men of war do more diligently keep the Seas than in winter weather ; and these times they commonly spend amongst the South or West Islands, and from thence either to the Bank [2] of Newfoundland, where they may easily be fitted with all necessaries, and so into the Main to trim, or as they do for the most part into Ireland, still casting to be with the Coast of Spain by the middest of August, and then they lie (30) no nearer than betwixt 20 and 30 leagues west of, in $37\frac{1}{2}$ and $38\frac{1}{2}$, in which height the Indies men come in, and there they lie till they understand [3] of the Indies men, which if they understand to be gone in (because the King's men-of-war goes in with them) they then come close aboard the shore, lying for the most part betwixt Cape St. Vincent, and Cape St. Maries, and sometimes chase men over the Bar of San Lucar.[4] In this month comes out the Malaga [5] Fleet, and many are bound into the Straits.

[1] Sail along the shore.

[2] A fishing ground known as the Great Banks of Newfoundland, about fifty miles east of Cape Race.

[3] *I.e.* have news of. [4] MS. St. Lucas.

[5] MS. Malligo. Also written Maligo (*Teonge Diary*, p. 36).

Generally they stay no longer than their Ships are clean to go well, as well to fetch up purchase, as to go away from others that may chase them.

A good voyage may be made upon the Coast of Guinea,[1] but because Pirates are seldom so well victualled as is requisite for so long a course, and for that the place is infectious, and the course long to fetch up to windward again, they seldom or never go to the South of the Canaries.

(31) At the Isles of Sall,[2] Donis,[3] and Bayon[4] in Galicia, they do use often to water, and ballast, but no other fresh victuals than Horses; and at Pontevedra[5] up the River of Vigo, in the same bay, a Ship of 8 or 9 foot water may sew[6] dry, and trim in spite of the Country, if there be two Ships together the one to ride afloat whilst the other trims; and there is not any other place alongst the coast of Portugal, or Spain, to water in, saving that at the Burlings a small quantity of water may be had, and in the winter time a small man may water in the Bay of Lagos.[7]

At Arzilla,[8] betwixt Cape Spartel[9] and El Araish,[10] being on the coast of Barbary, they may sell goods well, and have fresh victuals.

[1] MS. Ginny. [2] Salvora. [3] Islas de Ons.
[4] The Cies Islands off Vigo.
[5] MS. Pte. Fedro. Capital of the province of that name, thirteen miles N.N.E. of Vigo.
[6] MS. Seawe. See p. 221.
[7] MS. Laugust. Twenty miles N.E. of Cape St. Vincent. In a document at the end of the 16th century it is spelt Lawgust (Corbett, *Papers relating to the Spanish War*, 135).
[8] MS. Arzeele. On the west coast of Morocco, twenty-five miles S.S.W. of Tangier.
[9] MS. Spratt. Extreme N.W. of Morocco.
[10] MS. Allaroch. Forty-five miles S.S.W. of Tangier.

At Sallee[1] if it be fair weather, they may ride before the Bar, and have victuals and water, and sell goods well, but for the most part the Sea breaks so on the Bar that they can hardly water.

(32) At Fidallah[2] they may sell goods very well, have store of victuals, good ballast, and ground a ship that draws nine foot, but here is no water; besides if the wind comes to the North-west, it is a most dangerous Road, yet here they use much.

At Taffny[3] a small man that dares ride near the Shore may water well.

At Saffi[4] a man may sell goods well, have fresh water and victuals, but the Road is dangerous, if the wind comes to the Southward of the South-east, so that then they must put out, yet the Sea will give them warning[5] of any foul weather; besides the Castle cannot defend them, in which respects they seldom stay though they stop there, and here Ships may chance to take good purchase in the Road, of English, Dutch, and French.

At Mogador[6] they sell goods well, and have fresh victuals, but no water. On the Islands[7] at the time of the year, there is great store of

[1] MS. Sally.

[2] MS. Fidally. Sixty-five miles S.W. of Rabat.

[3] ? Cape Tefelneh, west coast of Morocco, in 31° 6′ N.

[4] MS. Saphie. West coast of Morocco, in 32° 19′ N.

[5] 'That is, the sea will come swelling in before the wind, as at St. Saphie of any foule weather' (*Seaman's Dictionary*, p. 211). '. . . out of which the ships that ride there put to sea when they find, by the bellow of it, the wind likely to endanger them with a westerly gale' (Monson, *Naval Tracts* (Ed. Oppenheim) iv. 407).

[6] MS. Maggador. On the west coast of Morocco, about thirty miles N. of Cape Tefelneh.

[7] Canary Islands.

young hawks and pigeons, which they (33) use to eat, and here they use much.

At Santa Cruz [1] they may water, wood, ballast, have fresh victuals, sell their goods, and ride safe under the Castle; the Road is very good also, so that there they stay long and use much.

At Massa [2] 5 leagues to the Southward of Santa Cruz they sell goods very well, and have fresh victuals, and water, but they ride far off, and the Road dangerous, so that they must be beholding to the Moors for their necessaries; [3] else they can do nothing, and this is the farthest Southward that they use on the Barbary coast, unless very rarely some go to Rio d'Oro [4] where they can have nothing but water.

At the Desertas [5] by the Madeiras they water and perchance get some Beeves there.

In the Canary Islands they may water at Lanzarote [6] and in the Calmes, but if they dis-

[1] Agadir, Morocco, twenty-three miles S.E. of Cape Ghir. Mainwaring records that at 'Santa Cruz in Barbarie,' the 'winde doth not blow home' (*Seaman's Dictionary*, p. 137).

[2] MS. Missa.

[3] 'Nossaveries' in MS. The copy *Sloane MS.* 1010 has 'Nosaveries,' and so has the *Harleian transcript.*

[4] The seat of the Government of the Spanish possession of Rio d'Oro.

[5] MS. Dezarts. Thirty miles S.E. of Madeira.

[6] MS. Lancerot. On the 6th of September, 1617, Raleigh's fleet of 13 sail anchored off Lanzarote. They landed by night in the hope of getting fresh provisions and water, but the people, believing them to be Barbary pirates, killed 15, though the governor himself knew that the ships were English. The latter had informed Raleigh, that he should have nothing but what he would get by the sword. Thereupon Raleigh retired, but before leaving, his party tried once again to get water in a remote part of the Island, with the result that several of the men were ambushed (*S.P. Dom., Jas. I.*, xciii. 134; xcv. 22; Edwardes, *Raleigh*, i. 604–8).

patch not in one day there the islanders will entrench themselves in the sand and cut them off.

(34) At Lupo [1] they may get goats but nothing else.

In the Western Islands [2] they may water, on St. George's,[3] on that side toward the Peak.[4]

At Flores,[5] round about the Island, they may water, wood, and ballast, and the inhabitants will not offer to molest them, but now they dare not trade with Pirates as they were wont, by reason that the Governor of the Terceiraes [6] hath punished them severely for it; yet at Corvo [7] they will trade by stealth, and there they use very much.

On the bank [8] of Newfoundland they easily get bread, wine, cider, and fish enough, with all necessaries for shipping.

In Newfoundland, if they be of good force, they will command all the land, in regard that the Fishermen will not stand to each other, and so may a small man fit himself in divers places of the Land, where there be but a few small Ships, yet there are not (35) many pretenders thither, in regard that the course is very long, and the wind so very apt to be betwixt the west and north-west, that unless they come by the middest of June, they may (if they be not well fitted) be starved in the traverse.[9] It hath been

[1] ? Lobos Island. [2] The Azores.
[3] San Jorge. [4] Pico Island: has a volcanic peak.
[5] MS. Flowers. [6] MS. Tarceres; *i.e.* the Azores.
[7] MS. Corves. Smallest of the Azores.
[8] *I.e.* the great fishing Banks.
[9] MS. Travas. 'A Travers is the varietie or alteration of the Shippes motion upon the shift of windes, within any Horizontall plaine superficies, by the good collection of which

moved to the State many times to send Wafters [1] to safeguard the Fishermen, but the best and cheapest way were to command those of every harbour to fortify the place, and to mount some few ordnance, which might easily be done amongst so many men, especially in the beginning of the year when they have little or nothing to do; yet I must confess that 2 or 3 Ships would do much good, though they cannot absolutely perform the service, in regard that the current sets so strongly to the southward, and the wind for the most part betwixt the west and north-west, so that those that sail to the northward shall be to windward, and besides there are so many Ships coming and going that they shall not know which to chase, and the fog so great that they can have no long chase (36). In the out Isles of Scotland [2] and in divers places of

Traverses the ship's uniform motion or Corse is given' (Davis, *The Seaman's Secrets*, 1607; *Hakluyt Soc. Reprint*, p. 240).

[1] Convoys. Requests to send men-of-war to guard the fishermen and convoy them home are frequently met with in the *State Papers*. In May 1620 John Mason, governor of Newfoundland, was granted a commission in the ship *Peter and Andrew*, of London, 320 tons burthen, to press such ships as were necessary for suppressing the pirates. Three years later two men-of-war were sent out to convoy the fishing fleet home. Lord Baltimore petitioned the King in 1628 that two of the Royal fleet at least might be appointed to guard the coast for the safety of thousands of British subjects. These appeals generally met with little response, and in 1636 the merchants of the western ports of England were petitioning Charles for protection for the 300 vessels that were then on their way home from Newfoundland (*Prowse*, 108, 112; *S.P. Colonial*, vol. i. p. 93; *Weymouth Charters*, 1883, p. 178).

[2] On account of the alarm occasioned by the presence of pirates on the coast of Scotland, two ships under the command of Sir William Monson were despatched there in 1614. When

the Main, they may trim well and in the Isles have any provision they have; but because we have little trade into those places, there be few that know them, and so for want of Pilots they seldom come thither.

Within St. George's Channel at Milford and the coast of Wales, they may trim, but because the coast and Channel are dangerous and that for the most part one of your Highness' ships is either at Milford or at Dublin, they use seldom thither unless it be some small nimble Ship.

I never was at Iceland [1] or Friesland, and therefore can say nothing on my own knowledge what they may there do; yet I have heard and judge it may be true, that there amongst the Fishermen, they may fit themselves with men and victuals. Yet this I know by experience of divers that I have met, who have been there, and by the necessity of their voyage, that all those that (37) go for Iceland or Friesland must and do stop in Ireland, as they go back for the coast of Spain, to make clean their ships, and this place have I reserved for the last, in regard that it is most frequented by them, and therefore of most importance to be remembered, where besides that they have all commodities and conveniences that all other places do afford them,

Sir William arrived at Caithness, he found that their number had dwindled from twenty to two. One, when admonished on the wickedness of his course, surrendered, and the other, Monson recorded, had been ' not long before my boatswain's mate in the Narrow Seas.' Piracy was more remunerative than service in the King's ships, and Clarke, for such was the pirate's name, had the day previous to Monson's arrival been ' friendly entertained ' by the Earl of Caithness, as that nobleman's ' house and tenants lay open to his spoil ' (*Naval Tracts, N.R.S.*, xliii. 57).

[1] MS. Island.

they have also good store of English, Scottish, and Irish wenches which resort unto them, and these are strong attractors to draw the common sort of them thither. I omit Rat Isle,[1] Belle Isle,[2] and divers places on the Coast of Brittany,[3] because they are seldom frequented, and my purpose (for brevity sake) is to speak of the most important and the most used.

Cap. V.

These things being thus known, it remains now to consider of a remedy for all these enormities, and which (38) may be the best way so to handle the matter that those which are now out may be cut off, and those that are not yet may be prevented, which were both an honourable thing for the State, an acceptable thing to God, and a great benefit to all Christian Merchants.

First then to prevent their beginning, your Highness may do well to give special command to all officers of all Ports within your Highness' Dominions to enquire of the behaviour of such Seafaring men as are there, and especially of such as have been Pirates, and to have such as live dissolutely without seeking honest employments put in good security for their behaviour, or to be imprisoned. And in Ireland, because there is little or no shipping belonging to the Country, to command strictly that no seafaring man, especially that hath been a Pirate, shall come within 10 or 12 miles of the sea coast.

[1] ? Rhé. Captain John Smith writes: 'We arrived at Gulion not far from Rochelle . . . afterwards I put adrift for Rat Isle' (*General Historie*, 1619, ii. 211–2).

[2] MS. Bell Ile. [3] MS. Brittaine.

I know that there is such an order already,[1] and it is reasonable well observed in the South (39) Coast, yet not so well (as I have heard) but that some have lately run away with Ships from thence, and in the West and North-west on my knowledge it hath not been, nor is not so; but me thinketh the best and surest way, and that which might much advance the wealth and glory of our State, were to devise some more universal employment than now we have, by which men of that spirit might not complain, as they now do, that they are forced for lack of convenient employment to enter into such unlawful courses. The proof of this is plain, for since your Highness' reign there have been more Pirates by ten for one, than were in the whole reign of the last Queen.[2]

There being now no voyage to speak of but Newfoundland, which they hold too toilsome, that of Newcastle which many hold too base, and the East Indies which most hold dangerous and tedious, and for your Highness' Ships the entertainment is so small, and the pay so bad that they hold it a kind of slavery to serve in them.[3] I speak (40) of the private sailor not the officer. In this I must say to myself *Ne sutor ultra Crepidam*,[4] and leave the project to your Highness' singular judgment, only I will remember

[1] In 1612 an Act was passed for punishing pirates and robbers of the sea; and in October 1614 a further Act was passed for the suppression of pirates on the Irish coasts (*Statutes Ireland*, i. pp. 435–6; *S.P. Ireland*, 1611–14, pref. lxxi).

[2] Piracy was almost a recognized profession in the reign of Elizabeth. In 1563 there were 400 known pirates in the four seas (*Admin. of R.N.*, Oppenheim, p. 177).

[3] Sir Walter Raleigh wrote that men 'went with as great a grudging to serve in his Majesty's ships as if it were to be slaves in the galleys' (*Oppenheim*, p. 187).

[4] 'Let not the cobbler judge beyond his last.'

this, that it is an ill policy, which provides more for punishing than preventing of offenders.

Next, to take away their hopes and encouragements, your Highness must put on a constant immutable resolution never to grant any Pardon, and for those that are or may be taken, to put them all to death, or make slaves of them, for if your Highness should ask me when those men would leave offending I might answer, as a wise Favourite did the late Queen, demanding when he would leave begging, he answered, when she would leave giving;[1] so say I, when your Highness leaves Pardoning. And in the little observation I could make in my small travels, I have noted those Countries best governed, where the Laws are most severely executed; as for instance in Tunis, where no offence is ever remitted, but strictly punished according (41) to their customs and Laws. In 5 months together when I was coming and going I never heard of Murder, Robbery, or private Quarrel. Nay a Christian, which is more than he can warrant himself in any part of Christendom, may on my knowledge travel 150 miles into the country, though he carry good store of money, and himself alone, and none will molest him. So likewise, in my Commonwealth of most uncivil and barbarous seamen (the common sort of seamen I mean), that are of all men the most uncivil and barbarous, I could never have subsisted as I did, if I had ever pardoned any notorious

[1] Obviously in reference to Raleigh. The story as told by Oldys is to the effect that Raleigh one day approached the Queen, telling her that he had a favour to beg. 'When, Sir Walter,' said she, 'will you cease to be a beggar?' To which he replied, 'When your gracious Majesty ceases to be a benefactor' (*Raleigh Wks.*, 1829, i. 142).

offence, though committed by my truest followers, by which constant severity I kept them all in a short time in so good obedience, and conformity, that for few years I never had any outrageous offence, but had them all aboard my ships in as good civility and order, as it could not have been much better in a Civil state;[1] for questionless, as fear of punishment makes men doubtful to offend, so the hope of being pardoned makes them the apter to err.

To cut them off at sea, such ships must be employed as are proper for the business, that is floaty ships,[2] good sailors, the less remarkable by painting[3] the better, and of reasonable good force (42) in regard that the Turks of Algiers go in fleets some 8 or 9 sail together with 20 or 30 pieces of ordnance each of them. I am verily persuaded that some of your Majesty's ships, and some small advisers,[4] that went with sail and oars, being employed to those places where they resort, might cut off most of them in a short time. And if your Highness thought fit to sell the Turks of Algiers and Tunis (that they might take) into Spain, being worth £30 to be

[1] In T. Heywood and W. Rowley's *Fortune by Land and Sea*, one of the characters, Purser the Pirate, says:—

> Tho' outlaws, we keep laws amongst ourselves:
> Else we could have no certain government
> (Act IV. Sc. i.).

[2] 'A floaty ship is a ship which draws but little water' (*Seaman's Dictionary*, p. 149).

[3] This was characteristic of the age. The *Prince Royal*, built in 1610, had £868 expended on her for painting and gilding (*Oppenheim*, p. 205).

[4] *I.e.* dispatch or advice boats: a small fast sailing vessel, employed to carry intelligence. Admiral Smyth states (*Sailor's Word Book*) that they were first used in 1692, but there is evidence of their use at a much earlier period.

sold one with another; as also by purchase they may chance to find in them, I think by probability, it might more than quit the charge.[1] And then the chief care must be to employ such Commanders as know how to work and command like a man-of-war, where to find, how to draw himself to them, as also have a Commission joined with a ready wit and judgment, to do sometimes that upon the occasion for which he can have no direction or rule, which thing is only mastered by experience, particular use, and knowledge of these things by the Commander, wherein it will be necessary to consider what the Spaniard means when he says *Quien ha de ingañar uno Diabolo es menester que sea dos*.[2] The want whereof I take to be the chiefest reason that (43) neither the King of Spain's, nor the Hollanders', nor indeed any men-of-war that have been set out by the Christian Princes, have done any service toward the cutting them off.

I speak not of your Highness' Ships, because I think they have not of late been much employed to that purpose.[3] Or at least the Commanders

[1] On the 19th of April, 1618, the Venetian Ambassador, Contarini, wrote that there had arrived in England a 'certain individual' who had surveyed the fortress of Algiers. He reported that it would be easy to surprise the place and burn the ships. The people of Barbary, hearing of this, mustered 30,000 soldiers, with 80 vessels, to defend the place. In 1620 two English cavaliers went to Tunis and Algiers disguised as merchants, and contrived to bring back plans of the forts and harbours (*S.P. Venice*, 1617–19, p. 230; 1619–21, pref. lv).

[2] 'He who would cheat a devil needs himself to be two devils in one.'

[3] Sir William Monson in 1617, giving evidence before the Lords of the Council regarding the pirates of Algiers, was

have been so limited by their Commission, that they could not do what their own judgment would advise them to.[1] I cannot say to the glory of our Nation, nor your Highness' particular comfort and assurance, that we have many such, although there be some, whose eminent, long, and faithful service to the late Queen, as also to your Highness, makes them as plainly to be deciphered as if I should name them; yet to avoid the displeasure of those, who though they may not be worthy, yet will think themselves injured to be left out of a particular calendar, I leave them to your Highness to guess at, and to esteem as so many diamonds

of the opinion, that as the suppression of them was likely to be the work of years, all the maritime towns of Europe should contribute towards the charge. Spain and Holland should combine with England in the effort, and any Turks or Moors that were taken should be sold for slaves. The ships, he stated, should be between 250 and 300 tons each, with the exception of the King's ships. The fleet should be well provided with muskets and ammunition, especially chain-shot. The chiefest care, in Monson's opinion, was to keep the voyage secret, the captains not to know of their destination till they were at sea. The place of rendezvous for the combined fleets was to be the Isles of Bayon (*i.e.* Cies Islands off Vigo), they being most convenient for all squadrons to meet at without suspicion. The time of the year in which the expedition should start was in August or September, for in those months the Turks were usually at sea (*Naval Tracts*, *N.R.S.*, vol. xliii. pp. 79–85). Towards the end of 1620 James dispatched a fleet consisting of eighteen ships, under the command of Sir Robert Mansell, to Algiers, but, with the exception of obtaining the release of forty English captives, nothing was effected.

[1] A copy of Mansell's instructions in 1620 has recently been brought to light. He was informed that his mission was to extirpate pirates, but on no account was he to attempt any hostile act against Algiers, 'for fear of its strength and the Grand Signior's Amity' (Corbett, *England in the Mediterranean*, i. 115).

in your royal Crown.[1] And yet I think there may be many found able to command a private Ship, in company of a General, betwixt which and the (44) Commanding of an Armado and fleet, both for the discretion and judgment, to manage, handle, content, and command the Company, both in fear and love (without which no Commander is absolute) as also in the particular disposing and ordering of his Ships in fight, [there is as much difference] as is betwixt hunting with a Lime-hound[2] in a string, and a kennel of dogs that run loose, as is betwixt a single combat, and a battle of two Armies. I doubt not but in this case your Highness doth and will imitate the policy of the wisest Princes, such as your Highness, who do make of peace but a storehouse of war.

Lastly for the disappointing of them in Ireland, which I hold the most material of all; being that this is as the great earth for foxes, which being stopped, they are easily hunted to death, and for their best succour, can but hide themselves in cunny-holes, whence they are easily digged out. And as cunnies[3] may be easily destroyed, where they have no holes to hide themselves in, so I verily think that if they were (45) once debarred Ireland, they might easily be confounded, and without further trouble would end *Per simplicem desinentiam*.[4] To this purpose your Highness must allow one good

[1] Probably meaning Sir William Monson, Sir Robert Mansell, the Earl of Nottingham, and Lord Thomas Howard, Earl of Suffolk.

[2] Bloodhound.

[3] Rabbits.

[4] By merely ceasing to exist.

Ship for the South coast, that must continually keep the Sea, not coming into Harbour, but to trim or victual; which must lie South of Cape Clear,[1] betwixt 20 and 30 leagues, for they that come from the South do ever make that Cape for their landfall if they can. To which Ship must belong a nimble Pinnace, such as a Penecho Carvel,[2] which may with sail and oars quickly turn to windward, and this must still be in Harbour, till she hear of any Pirates, and then having directions where to find the great Ship, to advertize her.[3] In the same manner must be provided for the West and North-west, where must be two such, the one lying off Black Rock [4] or betwixt that and Tillen-head-land-to,[5] or not so far, for here they keep close aboard the shore, coming or going, unless it be like to grow a storm and then they hale further off. These ships would (46) quickly upon any notice be with the North Coast, so that I think these would serve for both those Quarters. I omit to speak of fortifying of Harbours there (which would put all out of question), both because of

[1] The most southern headland of Ireland.

[2] A carvel was the name given, from the fifteenth to the seventeenth centuries, to a somewhat small lateen-rigged vessel, chiefly used by the Spaniards and Portuguese. A Penecho carvel took its name from Peniche, a seaport twenty miles south of Lisbon. The carvels of Peniche used to resort to the Burlings to fish; they were excellent sailing vessels, and we are informed that 'there were few ships but they could fetch up, and then keep sight of them both night and day' (Monson, *Naval Tracts* in *Churchill*, iii. 199).

[3] *I.e.* advise. [4] An island off coast of Co. Mayo.

[5] Malinmore or Teelin Head, the most western point of Donegal. In Seward's *Topog. Hibernica*, 1795, it is spelt Tiellen-Head.

the great charge, as also that for other reasons of State, it may be held both inconvenient and dangerous. Further there must be a strict course, and duly executed, that no Vice-Admiral, or other, be suffered to speak with any of the Pirates, but to forfeit either life or goods, for so long as they have any communication with them, so long will there be indirect dealing and relieving of them.

And to conclude, neither the Deputy, nor any other Presidents, must have power to protect though it be but for one hour.[1] For by reason the Country be enriched very much by Pirates where they come, the Presidents of every place may be willing to protect and use them with all respect they may conveniently, to draw them to their quarters. All which is done under colour of sending to the State, to know if they shall be (47) pardoned or not. In the meantime they trim their Ships, spend their money, are well refreshed, and almost weary of the shore, so that Pardon or no Pardon they must of necessity go to Sea again, and of this there is daily experience. These things being strictly commanded by your Highness, and duly and honestly observed by the Officers, will questionless be an infallible way to destroy all that are out, and so dishearten all that have any pretence that way that within a short time there will not be one English Pirate, nor any have encouragement to enter into it again; which though it may be some charge to your Highness, yet will the honour which your

[1] Sir Richard Moryson wrote in 1620 that it was impossible to prevent the relief of pirates on the West coast of Ireland, contrary commissions being issued daily. When he intended to prosecute the pirates, he stated, others had authority to parley and protect them (*S.P. Ireland*, 1615–25, p. 302).

Majesty shall gain thereby, with the benefit to all Christendom, much preponderate the pressure of the expense.

In which business, if it be worth your Majesty's consideration I say no more but this, *Delibera lente, quod decreveris constanter urge.*[1]

(48) My humble suit[2] now unto your Highness is, that if there be anything remembered here that may serve to inform your Majesty in the course of these affairs as they may not be taken as a particular information against any, for I protest on my allegiance I aim at no particular ends but merely to serve your Highness and freely to tell the truth, which I humbly desire may serve to advise your Highness hereafter, and not as an occasion to call anything past in question.

[1] Be slow in council, swift and determined in action.
[2] MS. Sewte.

A SHORT DISCOURSE OR PROPOSITION CONCERNING THE FRENCH FISHING UPON THE SOWE

A SHORT DISCOURSE, OR PROPOSITION, CONCERNING THE FRENCH FISHING UPON THE SOWE, THEIR ABUSING IT AND THE REMEDY.[1]

To the Right Honourable Sir John Coke, Knight,[2] Principal Secretary of State to his Majesty of Great Britain.

RIGHT HONOURABLE,—Your singular virtue, and prominent care and judgment in all things concerning Government of the State, more particularly in affairs of the Sea, which tends to the King's present safety and honour, do properly, and as it were naturally draw the direction of this discourse unto you. And your honourable favours, wherewith you have obliged me to honour and serve you, merit more and greater acknowledgements than can be exprest by me in presenting it unto you. Were it better, I should with more confidence and cheer deliver it to your Honour, being conscious that wherein I could best serve you I should most delight myself.

The matter and subject of it I dare assure your Honour is good, and worthy consideration;

[1] *S.P. Dom.*, Chas. I, clxxx. 96 [1630 ?].

[2] Sir John Coke, born 1563. In 1618 he was appointed one of the Commissioners of the Navy, and the reform of the naval administration was mainly due to him. Between 1621–28 he sat several times in Parliament. In 1625 he was made one of the principal Secretaries of State.

though by my disability to clothe it better, I present it in rags: an imperfection I presume your Honour will easily dispense withal at my hands, knowing that my profession is rather action, than expression. The abuses and complaints, herein expressed are Catholic, the remedy Orthodox, such is my faith to God and belief in your Honour's noble inclination toward me, that I shall not only endeavour, but struggle and strive to apprehend any occasion whereby I may manifest to the world that I am in all duty and affection,

Your Honour's humble servant,
H. MAINWARING.

The State of the Proposition, and the manner of the Frenchmen's fishing upon the Sowe.

There is a bank, or fishing ground called the Sowe,[1] which lies betwixt Rye[2] and Dieppe,[3] the outwardmost part whereof is near one third over the sea, this Sowe, which they call the Smooth Sowe, is three leagues long, and three broad, depth 26 and 28 fathoms; the French make it 10 leagues for they fish till they bring Beachy N., Fairlight W.N.W., and fish in 30 fathom; the Smooth Sowe (which now particularly they call ours) bring Fairlight N.W. till Fairlight N.[4]

[1] MS. Zowe. Monson speaks of the Sowe as being 'a rocky ground a league and more in length, and six leagues south off at sea to Rye' (*Naval Tracts* (Ed. Oppenheim), v. 274).

[2] MS. Rey. [3] MS. Deepe.

[4] MS. Fayre Lee. Fairlight near Hastings. In Norden's Map, 1616, it figures as Fayrleigh. On May 3, 1609, Sir G. Newman, Judge of the Admiralty Court of the Cinque Ports,

This Sowe is as a Park in the Sea, for it is encompassed with rocks, as they find by their sounding, and is the choice nursery for Turbots, Halibuts, Pearls,[1] Sole, Weavers, Gurnards, etc. that lies near these parts to supply his Majesty and the court with principal fish as also the City of London and the adjacent country.[2]

There is no ground betwixt that and the coast of France where they have of these sorts of fish,

wrote to the Mayor and Jurates of Rye: 'The French confesse the Sowe to be the King's wholly and promise never to use it more without leave, but when it cometh to be questioned where the Sowe lyeth and how much it conteyneth they allow us a peece of the sea about five miles from our shore and in length and breadth about some seaven miles, which as you know is not nigh the Sowe by many leagues . . . For that parte which you accompte the Sowe they terme it the Vergoye and the Aleppo and soe with strange names they intend to put us quite besydes the Sowe.' Newman then instructs the Mayor to send ten of the oldest fishermen of Rye to measure the Sowe:—'They must observe,' he writes, 'for the length from east to west, right over to what parte of Fraunce the east end lyeth and to what parte of England; soe likewise right over to what part of France the west end lyeth and soe to England. Then for the breadth, to what part of Fraunce the nighest part of the Broadsmoth or the Sowe lyeth and how nigh to that coast; then must they as nigh as they can gesse and observe the juste length of the Sowe from east to west and the juste breadth from south-east to north-west. This being done, they must come up hyther when I send for them to depose this upon theyr oathes, and soe I doubt not to procure an order for perpetuall quitnes by the honorable Commissioners that it shall remaine without question herafter' (*Rye MSS., Hist. MSS. Com.* XIII. iv. 143–4).

[1] *I.e.* Brill.

[2] 'The towne of Rye hath binn of soe greate consequence to this State that it hath supplied his Majesty's howse and this parte of the kingdome with more plenty and store of fish then any two townes of England' (*Rye MSS., Hist. MSS. Com.* XIII. iv. 167).

only Plaice and some Whitings, and therefore the French Kings time out of mind have by way of request obtained from the Kings of England leave to have some certain boats allowed them to fish for their own diet and the Court.

All Queen Elizabeth's time they could never obtain license for more than 4 boats.

In King James's (who did not much love fish) they got leave for 9 to serve the court, 4 for the Duchess of Guise, and 1 for the Governor of Dieppe.[1]

These boats and their Masters are chosen by the Governor of Dieppe who sends them over to the Lord Warden of the Cinque Ports or his Lieutenant to receive License from him, and to enter their Licenses[2] in the Clerk's Office (pretending that no other ought to fish) and also to have their nets viewed to be of lawful scale, viz. 5 inches, and so those nets to be sealed, and they enjoined to fish with no other nets; and these licenses they must renew yearly, for the which they pay three crowns a piece to the Lord Warden's secretary, and one to the Clerk of Dover Castle.

These boats, in regard that the Fasts in France fall not out even with ours, as also out of especial respect to have the French King furnished, have leave to fish in season, and out of season.[3] That

[1] On the 5th of December, 1625, license was granted to nine fishermen of Dieppe, for the French King's service, and to four of Treport for the Duchess of Guise (*S.P. Dom.* DXXII. 58). A certain number of licenses were also granted in Cromwell's time, which were renewed at the conclusion of the first Dutch war (Fulton, *Sovereignty of the Sea*, p. 440).

[2] One of these licenses is printed *in extenso* in Fulton, *Sovereignty of the Sea*, p. 749.

[3] 'And whereas liberty is given to the French to begin their fishing the fourteenth day of February, which is one month before the time limited by the constitutions, because

is, that whereas our English fishers are limited from the 15th of March until Bartholomew Day to fish with Trammels, and after that all the winter (which is the best time for Trammelling) till next March to fish with lines, and at no time to fish in the night, that the fish may have time to feed and rest,[1] the French that are licensed do tramel all the winter, and in the night by allowance.

These boats of Dieppe make two Seaings,[2] as the fishermen term it (that is two sea voyages) every week ; come from Dieppe Sunday night, and return a Wednesday, for Friday and Saturday at Paris, if possibly the wind and weather give them leave.

The Inconveniences of these Licenses, Abuses of the French by colour of them, and prejudice to our State.

1. Under the colour of these 14 Boats so licensed, as many more do fish, for every Boat hath one other to attend her, that as one goes

that their Lent falleth out commonly before ours, therefore because I will have them enjoy no privilege whereof you shall not partake I am well content that you begin your fishing at the same time.' Feb. 8, 1609–10. The Earl of Northampton to Mayor etc. of Rye (*Hist. MSS. Com.* XIII. iv. 144).

[1] The fisherfolk of Rye sometimes evaded these restrictions, and in 1602 several of them were convicted of having ' offended in fyshing with netts insufficient, and of unlawfull scale, and at prohibited tymes and seasons, especially contrary to the lawes, in the night season, whereby the fysh, disquieted and wanting naturall rest, doe become both leane unserviceable and not so well bayted as in former tymes.' They were each fined 10*s*., and charged not to offend again, or they would answer to the same ' at ther uttermost perills ' (*Hist. MSS. Com.* XIII. iv. 124).

[2] MS. Seeinges.

in, the other stays out and takes the License, so one License serves for two Boats.

2. By reason that so many (or indeed any) French Boats are allowed, there come (conceiving they cannot be discovered, or distinguished by the English from the Licensed Boats) about 40 or 50 at a time from Treport which lies 12 miles E. from Dieppe,[1] and Saint Valery which lieth 12 miles S. and some other places upon the land, which for want of harbour do launch their boats off the land.

3. These Boats carry unlawful nets of 3 Inch $2\frac{1}{2}$ Mesh by reason whereof, their number which over lay the ground, and their unreasonable fishing, the fish have no time to feed and grow. And the Taties[2] (that is stones that are a fist or more of bigness, whereon grows a little weed like a teat, which is full of very sweet water which the fish suck) all torn up, whereon the fish feed and spawn. And also they take all unserviceable fish, viz. small Soles, Turbots, etc., which they throw to their hogs (as hath been seen by whole bushels full).

4. The fish being destroyed by these means, his Majesty, the Court, City, and Country[3] are

[1] Depositions of William Palmer of Rye, fisherman, that on the 9th of February, 1605, 'at a place called the Sowe, he came upon about five or six and thirty sail of French fishermen' (*Hist. MSS. Com.* XIII. iv. 131).

[2] This word is not in the *Oxford English Dictionary*.

[3] By an ancient custom it was enacted that the Lord Warden of the Cinque Ports should have 'the choyse of the third fishe for his household provision.' This seems to have been neglected during the early part of the seventeenth century, and on February 15, 1622–3, the Lord Warden had cause to complain of this. 'I shall not looke back to neglects past,' he wrote, 'yet I shall from henceforth expect a reformation, and to that end I hereby will and requyre you to

ill-supplied, and though fasting-days as appeareth by his Majesty's late proclamation, are like to be kept strict, yet fish is like to be scarcer, and dearer, and the King of France as well as we worse served. Although 'tis true, that by this means our fish is more plentiful there than here, where the species of some, viz. Gurnards is scarce now known or remembered, yet at Dieppe one boat brought in a 100 this winter at one time.

5. By reason that Fish is grown so scarce and the grounds destroyed, the Town of Rye an ancient Port Town (which did chiefly subsist and flourish by fishing) is grown to great decay, and the Navigation almost laid down.[1] Houses fall now; nay, they pull them down for want of Tenants.[2] Whereas, in former times they had 40

cause and commaund the fishermen of your towne to deliver . . . such a proportion of fishe as hath bene used and att such reasonable rates as you shall thinke fitt' (*Hist. MSS. Com.* XIII. iv. 161).

[1] In 1618 a petition was presented to the Lord Warden by the Mayor and Jurats of Rye, in which they stated that 'whereas we have hitherto been, by reason of a harbour, in some trade and commerce by sea, enabled to bear about the charge and maintenance of this towne; but now is our harbour so decayed that all trade hath forsaken us, and besides the important charge in defending the rage of the sea from eating up our ways to the town, and maintaining the jetties and places of refuge for our few fisher boats yet remaining, with the extreme poverty of our fishermen, who, by reason of the great spoil of fish, and fishing places so decayed, that thousands of them are ready to beg and starve for want; and many of them forsaking the town, have left their wives and children to parish charge' (Holloway, *Hist. of Rye*, pp. 337–8).

[2] In 1608 it was reported that the houses in Rye were 'so meanly rented, and so many standing empty, that it seemeth a thing impossible to levy upon the saide corporation' a proportionable sum of money for repairing of the harbour (*Hist. MSS. Com.* XIII. iv. 141).

or 50 Trammels, Hookers, and Harbourmen, now they have but 6 or 7. Whereas there was 500 seamen of the Train band, there is now few more then 100.

6. Our English being disheartened, the French do in a manner engross the whole fishing, for they are prohibited, and the fish as it were preserved for the French, whereby they increase their navigation ; enrich their Subjects with our trade, which I know cannot quadrate with reason of State, especially at these times.

The way to redress these abuses, with the objections against this Reformation, and their Answers.

By reason of continual exclamations against the French, there have been many fruitless ways proposed for Reformation, but I conceive there is no other means, or course, to be used for redressing these extreme abuses but this. Whereas his Majesty doth give license to the French to serve the King and Court (as that is the pretence and ground of his request) his Majesty being moved by these inconveniences, which do and necessarily will follow these Licenses to the French, will now appoint so many boats of his own Subjects which shall wholly attend the French King's service.

No question but the French King, knowing what a sensible great benefit his subjects receive by this fishing, will oppose it, but with other pretences than those which truly move him, or his Ministers.

1. First, he may pretend that the English will not serve him with that care and diligence to observe his seasons, as his own subjects.

I answer first, that those who shall be ap-

pointed for that service, shall put in security to perform and solely attend the French King's service, yet there needs not any doubt of that, for the profit is so much greater than here in England, that there needs no other obligation to bind them to it; the fish being ⅔ dearer there, viz: a dozen of Thornback [1] 3*s*. at Rye, at Dieppe 12*s*. A turne of Soles 3*s*., at Dieppe 10*s*.; besides the profit is many times so exceeding great, that in one voyage one boat hath made £100 of Weavers only.

2. Some favourers of the French may object, and express, that the King may keep a pinnace or two there to suppress and prevent these exorbitant fishermen, and to regulate them, and that this is proper for him being Lord of the Narrow Seas.[2]

I answer, that it is very unproper that the King's voluntary courtesy to another Prince, should draw a necessary charge upon himself, and far more becoming his wisdom *Quæ necessitate evenerant in virtutem vertere* [3] to make this use of the necessity that they impose upon his Majesty to bring them into better order, rather wholly to suppress them, than reform them, especially it being more beneficial, and much easier.

3. It may be objected that without any other course, the Reyers may prevent these abuses by

[1] The common ray or skate.

[2] In 1608 the Mayor and Jurates of Rye wrote to the Lieutenant of Dover Castle requesting him to use his 'good meanes unto our most honorable Lord Warden, that a pynnys of his Highnes may be graunted to come and lye in the harbor of Rye this present fishyinge season, to goe to sea, at tyme convenient, with our fysherboates' (*Hist. MSS. Com.* XIII. iv. 137).

[3] To turn to good account what had happened through force of circumstances.

taking the offenders whose confiscated goods may for recompense be converted to their benefit, as they were when I was Lieutenant under my Lord Zouch then Lord Warden.

I answer, that 'tis true the Reyers did surprise some 6 or 8 boats by order from me, but after that the French came so strong, that our men had much ado to save themselves, and in conclusion like overmatched Cocks turned cravens and ran out of the Pit, for by reason of these Licenses the French are so increased, and we so decayed, that they have from one place or other 8 or 10 boats for one, and so great, that whereas our men fish with 9 or 10 men and a boy, they have 20.[1] In brief our men are so few, and out of heart, the French so many and so galliard,[2] that there can be nothing expected from them without first the Reformation I pretend be established.[3] For the present the case stands thus betwixt them, that if the French can in modesty, or discretion, forbear laughing at our men, yet they, our men, cannot forbear mourning and repining at them, to see their bread, as it were, taken out of their mouths.

[1] The Mayor in 1608 wrote that the Rye fishermen feared attacks from the French fishermen who 'fysshe for herrings and coddes in great barkes, and our men fysshinge by them in small boates, they may spoyle their nettes by ronninge over them' (*Hist. MSS. Com.* XIII. iv. 139). [2] Valiant.

[3] In 1608 it was stated that the fishermen of Rye 'doe thinke themselves altogether unable (without the helpe of a pynnys of his Majesty's to be aydinge and assistinge unto theire boates, at the sea) to suppresse and repell the force of the French fysher boates by reason that they are soe many in nomber and so strongly prepared, armed, and violently beat to defend their unlawfull proceedings . . . they (the Rye fishermen) shall not be able to abide the seas in their lawfull fishinge without great danger of bloodshede' (*Hist. MSS. Com.* XIII. iv. 137).

4. But why should not the Governor of Dieppe (who chiefly doth interest himself in the behalf of the King) either use means to prohibit all those that fish without License (since their fishing is in part prejudicial to himself and the Boats licensed), or else forbear the charge and trouble of obtaining Licenses and fish freely as others do ?

For answer to the first part, the Governor of Dieppe pretending great sincerity and care that the fishing should not be abused by any unlicensed French, hath made complaints of those of Treport and Saint Valery, which *Re vera* is *pro interesse proprio*,[1] that his care concerning his own town boats may be the less doubted, and also really desire the suppressing of the other, which are prejudicial to his particular. But he hath no power to suppress them, being out of his jurisdiction, and for the King to suppress them is not to be expected, it being against the general good of his Subjects.

As for the second part to fish here without any License (the ground being undoubtedly appropriated to the King of England by the affinity of it to his coast) were such an apparent insolency, and so uncompatible for his Greatness and Majesty to endure an entertainer with him, that the King of France (well knowing how much the honour and right of our King will preponder at the pressure of any affinity or Alliance) will for his own ease and benefit make use of this *Arma tenenti omnia dat qui justa negat*,[2] and take licenses and use them like dark lanterns, which though one man carry, yet many may see by that light to follow in the dark unseen.

[1] In reality he is looking after his own interests.

[2] Lucan, *Phars.* i. 348. To him who comes in arms, He all things gives who justice would refuse.

5. It may be the King of France will undertake himself to redress all these abuses occasioned by his Subjects and therefore desire that the licensed Boats may continue as they do.

I answer if his real intent be only to be served with fish, then, grant the English can fish as well as the French (as there is no doubt), the King shall be served as he is now. But if under that colour, he desire to enrich his Subjects, to increase and strengthen his Navigation by impoverishing and weakening ours, I think the Law of Nature and reason of State will advise and oblige our King to prefer and preserve his own strength, and people, and *quantum in se est*,[1] to prevent such intentions, especially now the French begin to talk of *Mare Liberum*. Next if the Law of Nature and Nations agree in this rule, that no man must *uti suo ut alieno noceat*[2]; *a fortiori* why should the King of France *uti alieno ut sibi et alieno noceat*[3]? And for him to refuse, or dislike to be served by the King of England's subjects, when he receives this grace and benefit by the King's free grant, is as unreasonable as if I should lend one my horse, who should deny me to see him shod and saddled to my content that he may neither be foundered nor galled, but the better able to carry him his journey and do me service afterwards. And I should conceive by this niceness of the French King he should only present a looking glass to our Sovereign wherein to see what care he ought to take of his own and his Subjects' Boats.

[1] So far as in him lies.

[2] Make use of his own property in such a way as to injure other people's.

[3] Make use of other people's property in such a way as to injure both that and himself.

But the chiefest mover and stirrer in this business will be the Governor of Dieppe, though as I suppose in the King's name, in regard he gains near 2000 crowns a year by these Boats, as I have been credibly informed by the fishermen themselves. How unconsiderable he is in a business of this nature is so obvious to every man's judgment that I afford no other answer. So that having now by way of objections proposed such other ways as may be conceived for the rectifying of this fishing, and finding none of them sufficient or convenient for our State, I conclude as I began this point, that there is no other course, but to have the English appointed for the French King's service.

The Benefits which will arise to this Kingdom by this way of Reformation.

1. The Port and Town of Rye will again flourish and be repopulated.

2. Seamen, Shipping, and divers crafts belonging to them will be increased and maintained.

3. The Company of Fishmongers (who now complain of want) will be enriched.

4. By the increase of Fish, the Court, City, and Country more plentifully served, and at better rates, and the King of France also.

5. We shall return the French monies into this Kingdom for our Fish, which now they have for nothing.

6. There being no Frenchman allowed to fish here, those of Treport, Saint Valery, etc., have no colour [1] to come, or if they do, the English will be so many and so frequent there, that they will

[1] MS. Culler.

easily be intercepted, and being taken, confiscated, as I did 6 or 8 when I was Lieutenant of Dover Castle.

7. It is a benefit to our State in this kind, not to benefit the French at all (I mean not to deny the King fish but the manner of his fishing).

Machiavelli (who though a knave in religion, yet no fool in State affairs) in his book *de Principe* makes it a maxim *fra gli Principi ben se puo fare lo Parentado la amicitia mai,*[1] then where there is such uncertainty of friendship (as late experience manifested) what greater care is there for Princes, than relatively by being enjealoused to enfeeble each other, and inform themselves. *Instar omnium,*[2] the Affairs, Privileges, and Prerogatives of the Narrow Seas, so highly concern his Majesty of Great Britain, that whosoever either by slight, or power, aims to enfranchise himself, then he strikes at his Royal Crown, and desires to swim in the heart blood of our State, for such I may truly (though metaphorically) term the sea to be where whosoever shall aim to make himself Pompey, our King must still be *Cæsar aut Nullus.*[3]

[1] 'Between princes marriage relationships may exist, but never friendship.' This quotation cannot be traced: it does not occur in *Il Principe.*

[2] By general consent.

[3] The manuscript was evidently unfinished, for the next folio is headed 'The manner and way to commence and proseed in this busenese.'

THE SEAMAN'S DICTIONARY

THE SEAMAN'S DICTIONARY

OR

NOMENCLATOR NAVALIS

INTRODUCTION

The name of Sir Henry Mainwaring deserves an honoured place in our naval literature on account of the unique distinction he holds in being the earliest authority we have in English on seamanship and nautical terms. His 'Seaman's Dictionary,' which is the text-book of seventeenth-century seamanship, was compiled during Buckingham's tenure of office as Lord High Admiral of England, although it was not printed until 1644, when Parliament being in possession of the fleet it was thought 'so universally necessary for all sorts of men,' that it was conceived 'very fit to be at this time imprinted for the good of the Republic.'

The rise of a school of professional seamen was a marked feature of the period, and Mainwaring was an officer who represented both the scientific and practical sides of his profession. His book was primarily intended for the use of the gentlemen captains of the day, who, 'though they be called seamen,' did not 'fully and wholly understand what belongs to their profession,' and his object was to instruct those 'whose quality,

attendance, indisposition of body (or the like),' would not permit them 'to gain the knowledge of terms, words, the parts, qualities, and manner of doing things with ships, by long experience.' It is curious that such a work, the subject of which opened up a new field in our naval literature, should have remained for twenty odd years in an unpublished state; but there is evidence to prove that it was freely circulated in manuscript among the naval commanders of the time, and that Buckingham, Mervin, Denbigh, and Northumberland, among others, possessed copies.[1] Its publication was fully justified, and the high value placed on the work may be judged from the fact that during the Dutch wars there were two, and possibly three, reprints, though copies are now extremely scarce.

By stating it to be the earliest treatise in English on seamanship we do not intend to infer that it was the first on navigation; many works on that subject appeared during the latter half of the sixteenth century.[2] As Mainwaring informs us in his preface, 'to understand the art of navigation is far easier learned than to know the practique of mechanical working of ships, with the proper terms belonging to them. In respect that there are helps for the first by many

[1] A copy bearing the signature of Sir Henry Mervin is among the Sloane MSS. (No. 207); while one with the arms of the Earl of Denbigh is among the Additional MSS. in the British Museum (No. 21571). A copy with the arms of Percy is among Lord Leconfield's MSS., and the copy dedicated to Buckingham is at present loaned to the Institution of Naval Architects.

[2] For a list of works on navigation up to and including the reign of Elizabeth, see Admiral Sir A. H. Markham's edition of 'J. Davis, Voyages' (Hakluyt Society, 1880, pp. 339–367).

books (which give easy and ordinary rules for the obtaining to it), but for the other, till this, there was not so much as a means thought of, to inform any one in it.' This last statement, of course, refers to the work when it was originally compiled, for the honour of being the author of the first printed work on the subject belongs to Captain John Smith, the Governor of Virginia. His book, which is entitled 'An Accidence, or the Pathway to experience Necessary for all young Sea-men,' was published in 1626, and appears in the Stationers Company's Registers under the date of October 23 in that year.[1] It is a small quarto volume, and was printed for Jonas Man and Benjamin Fisher. The late Professor Arber, who edited a complete edition of Smith's works, mentions that 'this tract was a new departure in our literature, being the first printed book on seamanship, naval gunnery, and nautical terms.'[2] Captain Smith's work is in fact a 'tract,' and occupies 42 pages, against the 118 closely printed pages of the 'Seaman's Dictionary.'

In the article on 'Seamanship' in the last edition of the 'Encyclopaedia Britannica,' the 'Seaman's Dictionary' of Sir Henry Mainwaring is stated to be, 'if not the first treatise on seamanship written in English, at least as old as its only rival, the "Accidence."' Hitherto the date of its composition has been open to doubt, and it has generally been assigned to the year 1625, that being the date on a manuscript copy which belonged to the Earl of Denbigh.

There are other manuscripts, however, which are certainly earlier than this, and we have been

[1] Arber, *Transcripts*, iv. 169.
[2] *Works*, 1884 ed., p. 786.

fortunate enough to discover among the magnificent collection of naval books and manuscripts of the late Mr. Charles Scott, the earliest of the manuscripts, which is dedicated 'to the Right Honourable the Marquis of Buckingham, Lord High Admiral of England, my most honoured Lord and Patron.' That the work was originally written solely for the use of Buckingham, and possibly at his instigation, is shown by the following personal note in Mainwaring's handwriting at the end of the preface, which is omitted from the other MSS. and from the printed editions :

'This, as I framed it of purpose for your Lordship's use, so only to your Lordship do I present it with my most humble service, who for your Lordship's many truly noble favours am ever bound in all duty and affection to profess and express myself, your Lordship's most humble and faithful servant, H. M.'

From this copy we are enabled to fix more precisely the date of its composition, as Buckingham was raised to the dignity of a Duke on the 18th of May, 1623. It is entitled 'An Abstract and Exposition of all things pertaining to the practick of Navigation,' and at one time belonged to Peter le Neve (1661–1729), the Norroy king-at-arms, and a zealous collector of manuscripts. His signature, 'Petri le Neve, Norroy,' appears on top of the title-page, which is reproduced as an illustration to this volume. There is also a copy among the Sloane MSS. in the British Museum with the same title, which is dedicated—

'To the right Honourable and my ever most Honoured Lord, Edward, Lord Zouch, Lord Warden of the Cinque Ports, and one of his Majesty's most Honourable Privy

Council. This discourse which I wrote in those lodgings wherewith it pleased your Lordship to honoured me, I held it my duty (in acknowledgment of that and many other your Lordship's most free and honourable favours) to present unto your Lordship with the faithful and affectionate service of Your Lordship's most humble and most obliged servant,

HENRY MAINWARING.'

Here we have a definite statement that it was written within the precincts of Dover Castle, and the date of the Buckingham and Zouch copies can be fixed to a period between February 1620, the date of Mainwaring's appointment to Dover Castle, and February 1623, when he incurred Zouch's displeasure.

The different manuscript copies have varying titles, and these alterations in title connote an expansion of the text by the inclusion of new matter. With the exception of the Denbigh copy they are all in folio; the handy form of this copy, and the fact that it has been damaged by water, suggests that the Earl may have taken it to sea with him on his various expeditions.

It had been intended to reprint this work from the printed edition of 1644, adhering to the spelling of that book, but a careful comparison with the manuscripts revealed so many and such serious errors in it that the Council decided to abandon this idea. The text of the following pages is a composite text formed from the collation of the undermentioned manuscripts. It was decided to modernise the spelling, which varies in the different manuscripts, but attention has been called to any spellings that seemed to present special points of interest.

Add. MS. 21571.—The copy that belonged to the Earl of Denbigh, and bears the date 1625. It is probably the latest of the MSS., as it contains a certain amount of matter not found in the others consulted. The errors and omissions are few in number, but unfortunately it has been so much injured by water as to be in places almost illegible. It is denoted in the footnotes by the letter (**D**).

Harleian MS. 2301 which appears to be a little, but not much, earlier than the above (**H**).

Sloane MS. 207.—Dedicated to Zouch (**Z**). The book of 1644 was printed from a MS. of about the same date as this one.

Scott MS.—Dedicated to Buckingham (**B**).

The additional matter not found in (**B**) is enclosed in square brackets [ ].

To the edition of 1644 the publisher prefixed an extract of four pages from 'The Victory of Patience,' 1636, entitled, 'The State of a Christian, lively set forth by an allegory of a ship under sail.' This has been omitted as not forming part of the original work.

The Council is indebted to Mrs. Scott for permission to reproduce the title-page of the original manuscript.

BIBLIOGRAPHY

THE | Sea-mans Dictionary : | Or An | Exposition | and Demonstration of all the Parts | and Things belonging to a | Shippe : | Together with an Explanation of all | the Termes and Phrases used in the Practique of | Navigation. | Composed by that able and experienced Sea-man S^r^ Henry | Manwayring Knight : And by him presented to the late Duke of | Buckingham, the then Lord High Admirall of England. |

I have perused this book, and find it so universally necessary for all sorts of men, that I conceive it very fit to be at this time imprinted for the good of the Republicke.
Septemb. 20, 1644. JOHN BOOKER.

London. | Printed by G. M. for John Bellamy, and are to be sold at his Shop at | the Signe of the three golden Lions in Cornehill neare the | Royall Exchange. 1644. |

(118 pages 4to.)

"Mainwaring's Seaman's Dictionary." J. Moxon.

In Richard Clavel's 'Catalogue of books printed in England since the Fire of London in 1666 to 1695,' published 1696, the above entry is to be found.[1] We have not succeeded in tracing a copy of this edition, which we believe appeared in 1666.[2] Joseph Moxon (1627–1700), shortly after 1660, was appointed hydrographer to the King, and had a shop 'At the sign of the Atlas' on Ludgate Hill, where he suffered materially

[1] P. 98.
[2] Watt in his *Bibl. Brit.* mentions an ed. of 1666, as does Allibone in his *Dict. of Eng. Lit.*

by the Great Fire.[1] A copy of this edition not being forthcoming, we can only assume that it was published in 1666, just prior to the Great Fire, and not subsequent to it, as stated in Clavel's catalogue. The assumption that practically all the copies were destroyed in the fire is supported by the fact that in 1667 another edition appeared.

The | Sea-Man's | Dictionary : | or, | An Exposition and Demonstration | of all the Parts and Things belonging to a | Ship. | Together with | An Explanation of all the Termes | and Phrases used in the Practique of | Navigation. | Composed by that Able and Experienced Sea-man | Sir Henry Manwayring Knight, | And by him presented to the late Duke of Buckingham, | the then Lord High Admiral of England. | [Here follows the imprimatur signed by John Booker, 20 Sept., 1644.] London, Printed by W. Godbid for G. Hurlock, and are to be sold at | his Shop at St. Magnus Church corner in Thames-Street | near London-Bridge. 1667.[2]

The | Sea-man's | Dictionary : | or, | an Exposition and Demonstration | of all the Parts and Things belonging to a | Ship. | Together with | an Explanatios (*sic*) of all the Terms | and Phrases used in the Practick of | Navigation. | Composed by that Able and Experienced Sea-man | Sir Henry Manwayring Knight, | And by

[1] Timperley, *Dict. of Printers*, p. 567. By the fire the booksellers dwelling about St. Paul's lost an immense stock of books in quires, amounting, according to Evelyn and Clarendon, to £200,000, which they were accustomed to stow in the vaults of the cathedral and other churches (*ibid.*, p. 543).

[2] This edition is extremely rare. There is a copy in the Pepysian Library at Cambridge, and we are indebted to Mr. S. Gaselee for his courtesy in supplying a transcript of the title-page. Pp. 117–124 are wanting, and it is bound with John Smith's '*Sea-man's Grammar*, 1653, and Henry Phillippes' *Sea-Man's Kalendar*,' 1667 (Pepysian Library, 1142 (2), size 7¼ in. by 5⅛in.). Another copy, belonging to the Earl of Pembroke, apparently complete, was sold at Sotheby's in March 1920.

him presented to the late Duke of Buckingham, | the then Lord High Admiral of England. | [Here follows the imprimatur, the same as in the preceding editions, except that it is unsigned.]

London, Printed by W. Godbid for Benjamin Hurlock, and are to be | sold at his Shop against St. Magnus Church on London- | Bridge near Thames-street, Anno Dom. 1670.

These last two editions differ slightly from the 1644 edition. The spelling is somewhat modernised, and the 'Preface' is signed 'Henry Manwayring,' instead of 'H. M.' as in that of 1644. The 1667 and 1670 editions have a 'Post-script,' pp. 125–132, 'My Anchor is away,' &c., besides a woodcut on the back of the title illustrating the points of the compass. Following the 'Preface' of the 1644 edition is, 'The State of a Christian, lively set forth by an Allegorie of a Shippe under Sayle,' taken out of 'The Victory of Patience,' 4 pages, signed 'R. Y.'[1] The 1644 edition has an index, which is omitted from the later editions.

There appears to have been another edition between the years 1675 and 1682, entitled 'The Sea-mans Dictionary; or the Exposition and Demonstration of all the parts and things belonging to a ship,' by Sir Henry Manwaring (*sic*). We have not succeeded in tracing a copy of this, which was 'printed for and sold by William Fisher, at the Postern-Gate, near Tower Hill; Thomas Passenger at the Three Bibles on London Bridge; Robert Boulter at the Turks Head; and Ralph Smith at the Bible in Cornhill, near the Royal Exchange.'[2]

Manuscript copies of the 'Seaman's Dictionary.'

Harleian MSS. 2301.—Nomenclator Navalis: or, an exact Collection and Exposition of all Words and Tearmes of Art belonging to the Parts, Qualities,

[1] *The Victory of Patience and benefit of affliction . . . extracted out of the choicest Authors*, by R.Y., London, 1636.

[2] From an advertisement at the end of *The Seaman's Practice*, by R. Norwood, 1682. *See also* Stationers' Co. Registers (Roxburgh Club), iii. 10, 43, 50.

Conditions, Proportions, Rigging, Fitting, Mannageing, and Sayling of Shipps ; with other Necessaries to be knowne in the Practique of Navigation. Also including so much of the Art of Gunnery, as concerns the Use of Ordinaunce at Sea.

Mainwaring's name does not figure on the MS., which is well written. The volume is in folio, and is paged 1–162, but really consists of 91 folios. Following the 'Preface' is the 'Index,' then a second title: 'A breif Abstract, Exposition, and Demonstration of all parts and things belonging to a ship and the practique of Navigation.'

Sloane MSS. 207.—An abstract and exposition of all things Perteyninge to the Practiq of Navigation.

This copy is dedicated to Lord Zouch, Lord Warden of the Cinque Ports, and signed 'Henry Maynwaringe.' On the first blank leaf is the signature of Sir Henry Mervin.[1] It is written in a neat hand throughout, and is in splendid preservation. It comprises 109 folio leaves, the pages being numbered 1–204. Following the dedication is an 'Index' of 4 folios (*i.e.* 6 pages), but the letters A, B, and C are missing. Then comes 'An Abstract and Exposition of all things Perteyninge to the Practique of Navigation,' within a pen-and-ink frame. This copy has two title-pages, and following the second title given above is the first entry—'Aft.'

Additional MSS. 21571.—Nomenclator Navalis or an Exact Collection & Exposition of all Wordes & Tearmes of Art belonging to the Parts Qualities Conditions Proportions Rigging Fitting Managing & Sailing of Ships. With other Necessaries to bee Knowne in the Practique of Navigation. Alsoe Including soe much of the Art of Gunnerie as concernes the use of Ordinance at Sea.

This copy is beautifully written in a small hand throughout, and comprises 288 octavo pages, with two blank leaves.

[1] A famous Stuart seaman. In 1623 he was accused of piracy and lodged for a time in the Marshalsea. One of the few commanders of the age who had the interest of the seamen at heart. Admiral for the guard of the Narrow Seas and Rear-Admiral in the ship-money fleet of 1637.

It has not the preface. On the covers are stamped the arms of the Earl of Denbigh. A MS. note pasted inside the cover states: 'Appears to have belonged to Sir W. Fielding, afterwards Earl of Denbigh, who married the daughter of Sir George Villiers. . . . Probably the arms and gilt borders were not put on until he became a Peer.'[1] Many of the letters on the title-page are done in gold, and following the title is an index, at the end of which is the date '1625.' It has been somewhat damaged by water and was purchased at Sotheby's, Aug. 19, 1856 (Lot 123).

Harleian MSS. 6268.

In folio, evidently an early seventeenth-century transcript, with the bookplate of Robert Harley. On p. 1 is a floral design with a pedestal of flowers at the base, and the words, 'Pro Domino Roberto Harley Amico meo.' This copy has not the general title, but following the first page is the 'Preface shewinge the use and scope of this booke,' which is unsigned. Then follows an 'Index of the Names and termes expounded, &c.' After this appears the sub-title: 'An Abstract and exposition of all things pertaininge to the practique of Navigation.' The work consists of 172 pages.

Public Record Office, State Papers, Domestic, Charles I, cxxvii.—A Briefe Abstract Exposicõn and Demonstracõn of all Parts and Things belonging to a Shippe, and Practique of Navigation.

This copy, which is written in a small neat hand, consists of 136 folio pages. Mainwaring's name does not figure on the title, neither is the 'Preface' signed by him. Following the 'Preface' is 'An index of the Names and Termes expounded in this Booke.' At the end of the volume is another index in quarto, viz.: 'An index of the Names and Termes of all things pertayning to the Practique of Navigation.'

[1] William Feilding, 1st Earl of Denbigh. Married Susan, daughter of Sir George Villiers, and sister of the Duke of Buckingham. Created Earl of Denbigh, 1622. Rear-Admiral in the Cadiz Expedition, 1625. In April 1628 he commanded the relief ships for Rochelle. Died 1643. (*Dict. of Nat. Biog.*) It will be observed that he was already a peer when he came into possession of this copy.

Lambeth Palace Library, Lambeth MSS. 91.

A folio volume of 311 pages (and six blank leaves), in a clear bold hand, entitled: 'A breife Abstract, Expositiõ & Demonstration of all Termes, Parts & Things belonging to a Ship, and the Practicke of Navigation,' within an ornamental pen-and-ink frame, with drawings of astrolabes, compasses, anchors, and a ship. On the back of the title-page are the arms of George Abbot, Archbishop of Canterbury, painted in colours. Then follows the dedication: 'To the most Reverend Father in God, George Lord Archbishop of Canterburie, his Grace, Primate and Metropolitaine of all England, and one of his Ma^ties^ most honorable Privy Counsell.' 'Most reverend, & my most honourd Lord, Your many gratious favors shewen to me, as well as to many others of my neere kindred makes me both bold & desirious to present this Monument of my misspent time to yo^r^ sacred view. The Subject is neither worthie, nor so worthilie handled, but that (in mine owne judgement) I thinck it far to meane to offer into the hands of a person so reverend and honorable. But my trust is, That yo^r^ Grace will ever looke both upon it, and myselfe with such gratious Eies, that I may have some assuruance, that yo^r^ Grace will not onely pardon both our Errors, But direct me from henceforth to Steere my course after yo^r^ Grace, who are the most skillfull and worthie pilot of o^r^ Churche & Comon-wealth. . Soe humbly kissing yo^re^ Graces hands, I rest

Your Graces most humble, faithfull
and affectionate Servant,
HENRY MAYNWARING.'

Following the dedication is the 'Preface,' as printed in the 1644 edition, then 'An Index of the Names and Termes expounded in this Booke.' The volume is handsomely bound in calf, elaborately tooled with a gilt device in the centre of each side, surmounted with the arms of the Archbishop.

Lambeth Palace Library, Lambeth MSS. 268.—Nomenclator Navalis, &c.

Title similar to Harleian 2301. Folio, seventeenth century, 323 pp. Without author's name.

Lord Leconfield's MSS. at Petworth House, Sussex.[1]—A brief Abstract Exposition and Demonstration of parts and things belonging to a ship and the practique of Navigation.

The text comprises 357 pages folio, with an index of 12 pages. The 'Preface,' which occupies four pages, begins, 'My purpose is not to instruct, &c.' The title-page has an ornamental pen-and-ink frame. The volume is bound in morocco, and stamped with the arms of Percy (six quarters), with the badge and coronet of the House of Percy in each corner. On the gilt fore-edge of the book is written 'Sir Hen. Manwaring,' and it was probably presented by Mainwaring to Algernon Percy, tenth Earl of Northumberland, when Lord High Admiral.

Library of the late C. C. Scott, Esq., Halkshill, Largs, Ayrshire.[2]—An Abstract and Exposition of all things pertayning to the Practick of Navigation.

This copy consists of 268 pages, folio, and on the title-page appears the signature of 'P. Le Neve, Norroy.'[3] The 'Preface' is signed 'H. M.'

The above title appears within an ornamental pen-and ink-frame, and following the title is a dedication 'To the right Ho^ble^ the Marquis of Buckingham, Lord high Admirall of England; Master of the Horse, & one of his Ma^tles^ most ho^ble^ Privy Councll [*sic*]. My most honored Lord & Patron.'

Lord Calthorpe's MSS.[4]—Nomenclator Navalis, or an exact collection and exposition of all terms of art, etc.

This copy consists of 130 folio pages, and is dated '1633.'

Another copy, same collection, contents the same.[5]

We presume that one of the above copies is identical with a copy that was formerly in the possession of Henry Yelverton, Viscount Longueville (1664–1704), entitled: 'A brief

---

[1] *Hist. MSS. Comm.* vi. 304.

[2] Now loaned to the Institution of Naval Architects.

[3] Norfolk antiquary (1661–1729). In May 1704 he was appointed Norroy King-at-arms. Le Neve's library and some of his MSS. were sold in February and March 1731. [*D.N.B.*]

[4] *Hist. MSS. Comm.*, Rep. 2, App., p. 45, No. CLXIX.

[5] *Ibid.*, No. CLXXVII.

abstract, exposition, and true demonstration of all parts and things belonging to a ship, and the parts of Navigation,' with Preface and Alphabetical Index. The Yelverton MSS. came into the possession of Lord Calthorpe.[1]

A copy was in 1697 in possession of Sir Erasmus Norwich, (3rd) Bart., of Brampton, co. Northampton.

We have not succeeded in tracing its present whereabouts. Sir Erasmus died in 1720. The MS. was entitled 'A brief abstract Exposition and Demonstration of all parts and things belonging to a Ship and the Practique of Navigation, or a glossary of Maritime Words and Phrases delivered alphabetically: with a table of the names of the Great Ordnance, the heights of their Diameters, their weight, length, etc.' Folio.[2]

[1] *See* Bernard's *Cat. MSS. Angliae*, ii. 169.
[2] *Ibid.* p. 215.

THE SEAMAN'S DICTIONARY

OR, AN

EXPOSITION

AND DEMONSTRATION OF ALL THE PARTS AND THINGS BELONGING TO A SHIP

TOGETHER WITH AN EXPLANATION OF ALL THE TERMS AND PHRASES USED IN THE PRACTIQUE OF

NAVIGATION

A PREFACE SHEWING THE SCOPE AND USE OF THIS BOOK.

My purpose is not to instruct those whose experience and observation have made them as sufficient (or more) than myself: yet even they should lose nothing by remembering, for I have profited by mine own labour in doing this; but my intent and the use of this book is to instruct one whose quality, attendance, indisposition of body (or the like) cannot permit to gain the knowledge of terms, names, words, the parts, qualities, and manner of doing things with ships, by long experience: without which there hath not any one arrived as yet to the least judgment or knowledge of them. It being so, that very few gentlemen (though they be called seamen) do fully and wholly understand what belongs to their profession; having only some scambling [1]

[1] Slipshod, bungling.

terms and names belonging to some parts of a ship. But he who will teach another man must understand things plainly and distinctly himself; that instead of resolving another man's doubts, he do not puzzle him with more confusion of terms of art, and so, to appear to know somewhat, will still expound *Ignotum per Ignotius*. And for professed seamen, they either want ability and dexterity to express themselves, or (as they all do generally) will to instruct any gentleman. If any will tell me why the vulgar sort of seamen hate landmen so much, either he or I may give the reason why they are so unwilling to teach them in their Art: whence it is that so many gentlemen go long voyages and return, in a manner, as ignorant and as unable to do their Country service as when they went out. These words, terms, and proper names which I set down in this book are belonging either to a ship, to show her parts, qualities, or some things necessary to the managing and sailing of her; or to the art of gunnery, for so much concerns the use of ordnance at sea. And those which are familiar words, I set them down, if they have any use or meaning about a ship other than the common sense; and in expounding them I do shew what use, necessity, commodity, discommodity, wherefore and how things are done, which they import; and therewith the proper terms, and phrases, with the different uses, in any kind appertaining to that word; which for better and easier finding out, and to avoid confusion, I have brought into an alphabet.

The use and benefit whereof is so apparent for any who hath command at sea, or for any who may be called to censure and judge of the sea affairs, that I need use no reasons to enforce

it : only this much ; this book shall make a man understand what other men say, and speak properly himself ; which how convenient, comely, and necessary a thing it is, all men (of sense) do know. Should not a man be leashed,[1] being a hunting or hawking, if he should cry *Hey—Ret*,[2] to the hounds, and *Hook again*[3] to the spaniels : or were it not ridiculous for a man (speaking of the wars) to call a trench a ditch ; or at sea, the starboard and larboard, the right and left side of a ship, and yet they do imply the same, and both dogs and men will understand them alike.

To understand the art of navigation is far easier learned than to know the practice and mechanical working of ships, with the proper terms belonging to them, in respect that there are helps for the first by many books, which give easy and ordinary rules for the obtaining to it ; but for the other, till this, there was not so much as a means thought of, to inform anyone in it. If a man be a sufficient seaman with whom I converse, and yet know not how to instruct me, I grant he may be fit to serve his Country, but not his friend. But I will speak it with as much confidence as truth, that in six months, he, who would but let me read this book over with him, and be content to look sometimes at a model of a ship and see how things are done, shall (without any great study, but conversation) know more, be a better seaman, and speak more properly to

[1] Beaten with a leash.

[2] According to the *N.E.D.* this is an obsolete, rare word of obscure origin. It was used of or to spaniels when game-shooting.

[3] There seems to be no other example of this expression, but the point evidently is that it would only be used in hunting, and the other expression only in game-shooting.

any business of the sea, than another gentleman who shall go two or three years together to sea without this: for by the perusing of this book, he shall not only know what to question and doubt of, but likewise be resolved.

H. M.

A

Aft or **Abaft** is a sea term properly used aboard the ship to distinguish betwixt things done or placed fromwards the stem, towards the stern of the ship; as when they say *Come aft, Go aft,* or the like; that is, come or go towards the stern: *Hale the sheet aft*: *The mast hangs aft*; that is, towards the stern: *A shot raked the ship fore and aft*; that is, came in before and went out astern.

Also we use[1] to say, *Abaft the foremast*; so that this word is not particularly limited to any part of the ship, but from every part of the ship hath relation to anything done, or placed towards the stern, in respect of any that are towards the stem; as, for example, when we hoist our yards, we say *Stretch forward the main halliards,* whose place is *abaft* the main mast; and contrariwise, *Stretch aft the fore halliards,* which are placed before the main mast, but *abaft* the fore mast. When ships meet, or being in consort, desire to know how all the company doth, they use to demand how they do all *fore and aft,* the reason whereof is for that the whole ship's company is divided, both in respect of the labour and command,

[1] *I.e.* are accustomed.

into two parts ; the boatswain and all the common sailors under his command, to be before the main mast ; the Captain, master, master's mate, gunners, quartermasters, trumpeters, &c., to be abaft the mainmast.

Aloof is a term used in conding [1] the ship, when she goes upon a tack, and is commonly spoken from the mouth of the condor,[2] to the steersman when he suffers the ship to fall off from the wind and does not keep her so near by a wind as she may well lie.

Amain is a term used by Men-of-War (and not by Merchantmen) when they encounter a ship, for that implies as much to the other as to bid him yield. *Amain* is used in this sense also : when anything is to be let down by a tackle into the hold or elsewhere, or that a yard is to be lowered, or the like. Then when they would have it come down as fast as it can, they call *Amain*, which is to let go that part of the rope which they held before, to let it down easily and by degrees. It [3] is also an adjunct to the greatest and chiefest of some parts of the ship, viz., the mainmast, the mainsail, the main beam [and the main yard, to distinguish it from others of the same kind, and by this difference it is understood that they are greater than the rest].

In Men-of-War we use *waving amain*, which is either with a bright sword, or any other thing, to make a sign to them that they should strike their top sails ; which they commonly do, either from the foretop, or the poop. To *strike amain* ; to let fall their top sails.

[1] Directing the helmsman, *vide s.v.*
[2] More usually ' conder,' but now obsolete.
[3] He is, of course, confusing two quite different words.

Anchor. The form and general use of an anchor is commonly known, but the several parts, proportions, distinctions, and appellations are understood by very few but practised and experienced seamen. The anchor doth consist of these several parts : the Ring, the Eye, the Head, the Nut, the Beam or Arm, the Shank, the Fluke, [to which belongeth a Stock, by which it is made to take hold of the ground].

The proportion which it holds in itself is : the Shank is thrice as long as one of the Flukes, and half the Beam.[1] The proportion in respect of shipping is—To a ship of 500 tons we allow 2000 weight for a Sheet anchor. The biggest ship in England's anchor, is but 3300 weight.[2] The distinctions are made by their use, according to the proportion they bear in the ship in which they are employed ; for that which in one ship would be called but a Kedger, or Kedge Anchor, in a lesser, would be a Sheet Anchor.

The sorts of anchors, which by occasion of their several uses receive different names and appellations, are : first, a Kedger, which is the smallest, which by reason of the lightness is fittest [to carry in the boat,] to stop the ship in kedging down a river ; the next a stream Anchor, which we use in deep waters to stop a tide[3] withal in fair weather. The others they call by the name of the first, second or third anchor, all these being such as the ship may ride in any reasonable weather, sea-gate[4] or tide. These are somewhat bigger one than another, and usually

[1] Apparently the beam is measured from tip to tip of the flooks.

[2] **D** gives 3500, *i.e.* 35 cwt.

[3] *I.e.* to hold the ship fast whilst the tide runs against it.

[4] Long, rolling swell.

when they sail in any Straits or are near a Port, they carry two of these at the bow. In which respect they are also called by the name of the first, second or third Bowers. The other, which is the biggest, and that which the seamen call their last hope, and is never used but in great extremity, is called the Sheet Anchor; this is the true *Anchora Spei,* for this is their last refuge.

The anchor is *a Cock-bell* when the anchor hangs right up and down by the ship's side: and this is appointed by the Master when he is ready to bring the ship to an anchor. *Let fall the anchor,* that is, let it go down into the sea. The anchor is *a peak*; that is, when heaving up the anchor, the cable is right perpendicular betwixt the hawse and the anchor. *The anchor is foul,* that is, when the cable [the ship riding at an anchor] by turning of the ship is got about the fluke, which will not only cut the cable asunder, but make the anchor not to hold. And therefore whenever we come to an anchor where there is tide, we lay out two anchors, so as that, upon the turning of the tide, the ship may wind up clear of either anchor. *Clear the anchor,* that is, get the cable off the fluke; or generally, when they let fall the anchor, they use this term, to see that the buoy rope, or no other ropes belonging to the ship, do hang about it. *Fetch or bring home the anchor,* that is, to weigh it in the boat, and bring it aboard the ship. *The anchor comes home,* that is, when the ship drives away with the tide or sea; this may happen either because the anchor is too small for the burthen of the ship, or for that the ground may be too soft and oozy. In such places we use to *shoe the anchor,* that is, to put boards to

the fluke in the form of the fluke, and make it much broader than before. In Port Farina[1] by Tunis, I saw the experience of *tallowing an anchor*, where, the ground being so soft, we shod our anchors and yet they all came home, and the ships drave aground; only one ship, which had an anchor tallowed, rode fast. The reason I could never truly know, but suppose that it might be because that the tallow might help the anchor to sink deeper into the ooze, and so find some harder ground at the bottom, than the other anchors. *Boat the anchor*, that is, put it into the boat.

Anchor Stock. This is a piece of timber fitly wrought and fastened at the nuts, crossing the flukes. The use whereof is to guide the anchor upon the ground, that one of the flukes may be sure to fasten in the ground, without which, the anchor would lie flat upon both the flukes and take no hold: the proportion whereof is usually taken from the length of the Shank.

Anchoring, or **Anchorage** is when we let fall an anchor, or more, into the sea, with cables to them, so that the ship may ride fast by them. We say, there is *good anchoring*, where there is shoal water, for in deep waters the sea hath more force against the ship, and the anchors are very long a-weighing upon any occasion; ground that is not too soft or oozy, in which the anchors can have no fast hold: nor too hard and rocky,[2] so that it may cut the cables. The best ground to ride in is a stiff clay or a hard sand. Also where they may ride out of the way of the tide, and lastly, where they may ride land-locked, so as that the sea-gate can have no power against

[1] 'Fareen.'

[2] 'Nor knotty,' **D.**

them : to which may be added that the lee shore on every side is so soft that if a ship come aground she can have no hurt. [For a road, we say there is good anchoring where there is good ground, and also where][1] they may have sea room to set sail if their cables break or the anchors come home. That place which hath all these commodities, is good to ride in, and here we say is *good anchoring* or *good anchorage*. *Bad anchoring*, or *bad anchorage* is a place where all or many of the contrary conditions are to be found.

[**Arm.** This is not used as a word of alarum at sea, as it is on land, for at sea we use to say, 'make ready the ship,' which implies the fitting of all things belonging to a fight. A ship that is full of munition, small and great, and her fights and ordnance well disposed and placed, is called a ship *well armed*. To *arm a shot* is to bind some oakum, rope-yarn or old clouts, &c., about one end ; as in cross-bar shot it is most commonly used, that that end which goes first out of the piece should not catch hold in any flaws of the piece, whereby it be in danger to break it. The same we use to any kind of broken iron, of two or three foot long, which we use when we come board and board in fight, out of our great ordnance. We also use to arm some small shot for muskets, like our cross-bars.]

An **Awning** is a sail or any other thing made of canvas or the like, which is spread over any part, or all of the ship, above the decks to keep away the sun ; that thereby, in hot countries, men may take the air, and yet not be so subject to the beams of the sun. In all hot voyages this is of infinite use, both to keep men from the sun

[1] **B** reads 'or else that.'

by day and the dews by night, which in some places are wonderful infectious.

Axletree. The axletree is the same in a carriage [1] as in a coach or cart, and supports the cheeks of the carriage whereon the piece doth lie. Also, we call the iron which goes through the wheel of the chain pump (and bears the weight of it) the axletree of the pump.

B

To **Bale** is to lade water out of the ship's hold with buckets, cans or the like. This because it is more labour and tires men sooner, and doth not deliver so much as all the pumps will, we never use but in great extremities, when either a leak doth over-grow the delivering of the pumps, or else that the pumps do fail us: which happens many times in extraordinary long pumping, that the pumps, with overmuch wearing, draw wind or chance to be stoaked,[2] or else the pump-boxes, irons or the like do fail us.

Ballast is that gravel, stones, lead or any other goods which is laid next the keelson of the ship to keep her stiff in the sea. Of ballast that is best which is heaviest, lies closest, and fastest, and is driest, both for the ship's bearing a sail, stowing of goods, the health of the company, and saving of cask and other goods; whereof if a ship have too much, she will draw too much water; if too little, she will bear no sail. *To trench the ballast*; that is, to divide the ballast in any part of the ship's hold, which is commonly done, to find a leak in the bottom of the ship, or to unstoak [the limbers of] the ship [when the

[1] *I.e.* a gun-carriage.

[2] *Vide s.v.*

water which the ship makes cannot come to the pump]. *The ballast shoots,* that is, runs over from one side to the other; and therefore corn and all kind of grain is dangerous lading for that will shoot [and is very apt to stoak the limbers], but only that they make pouches, as they are called, that is bulkheads of boards, to keep it up fast that it do not run from one side to the other, as the ship doth heel upon a tack.

[A **Bay** is when two points or headlands lie so far off into the sea that, drawing a straight line from the one to the other, there is made towards the mainland a hollowness or part of a circle which is filled with water, be it more or less, that same is called a Bay unless there be any passage navigable through, for then it beareth the name of a strait, and not of a bay. But commonly we do not give it the name of a bay unless there be some eminent depth and indraught, as it is usually termed. And it matters not whether the distance betwixt the points be little or much, for the Bay of Biscay, the Bay of Portingale,[1] the Bay of Mexico and divers others are many score leagues over from headland to headland, and also in depth, and Torbay[2] in Devonshire, with many the like, is not above (*blank*) mile over.][3]

The **Beak,** or **Beakhead** is that part which is fastened to the stem of the ship, and is supported with a knee which is fastened into the stem, and this is called the main knee; to this is fastened the collar of the main stay. In the beakhead the fore tacks are brought aboard, and is the proper

[1] The indentation of the coast between Finisterre and Peniche was exaggerated in old maps.

[2] 'Tarbey.'

[3] Found only in **D**.

stand where men do handle most part of the spritsails, and spritsail-topsail rigging; and this is also placed for the fashion and grace of the ship. *The beakhead steeves,* or stands steeving, that is, stands very much with the outwardmost end up towards the bowsprit. The beakheads of the Venetian Argosies and Spanish Galeons do so very much, by which we know them afar off.

Beams. The beams are those great cross timbers which keep the ship sides asunder and support the decks and[1] orlops; according to whose strength, a ship is much the better or worse able to carry ordnance. All strong and great ships have a tier of beams in hold, that is, a row of beams whereon lies no deck. The main beam is ever the next to the main mast, at which place we reckon the breadth of the ship; and from this we call the beams, both forward and aftward, by the name of the first, second, third, &c., beginning from this, which we call the midship beam.

To **Bear.** This word in some cases is taken in the ordinary sense, as for carrying much, as when we say a ship will bear much ordnance; that is, carry much by reason of her strength: also the bearing or stowing of much goods, from whence, when we describe the greatness of the ship, we say she is a ship of such a burthen; but this is used in many senses different, according to the diversity of the phrases. *To bear sail* well, that is as much as to say, she is a stiff-sided ship, and will not cower down on a side with a great deal of sail. A ship *to bear-out* her ordnance; that is meant, her ordnance lie so high, and she will go so upright, that in reasonable fighting weather she will be able to keep out her lower tier, and not

[1] 'Or' in **B**.

be forced to shut in her ports. One ship *overbore* the other; that is, was able in a great gale of wind to carry out more sail than the other could endure to do, viz., a topsail more, or the like. To *bear with* the land, or with a harbour, or a ship, is to sail towards it, when we are to windward of it. To *bear under* the lee of a ship is when that ship which is to weather comes under the other ship's stern, and so gives the wind to her. This is the greatest courtesy that a ship can give another at sea. The piece will *bear* more shot or not so much, that is, she is over charged, or will endure a greater charge. The piece doth *come to bear*; a term in the use of ordnance, by which is meant that now she lies right with the mark.

Bear in. When a ship sails before or with a large wind into a harbour, or channel, or else sails large towards the land, we say she *bears in* with the channel, land or harbour; but if she sail close by a wind we do not use that speech.

Bear off. When a ship would not come near a land or another ship but goes more roomer [1] than her course doth lie, we say that she *bears off* from the land. Also, when we tell how one headland, island, ship, or the like, doth lie from another (that is, upon what point of the compass) we say they *bear* right East, or West, or otherwise, one of another. In hoisting anything into the ship, if it catch hold by any part of the ship, or ordnance or the like, they say *bear it off* from the ship's side. So if they would have the breech or mouth of a piece of ordnance or the like put fromward one, they say, *bear off*, or *bear about* the breech; so that generally seamen use this word 'bear off,' in business belonging to shipping, instead of the

[1] Goes more large.

word 'thrust off,' which to the like sense is most commonly used amongst others.

Bear up. This is a word we use in conding the ship, whenas we would have her go larger or more before the wind than she did. *Bear up round*, that is, to put her right before the wind, or to bring her by the lee: the manner of doing it is no more but thrusting the helm up to windward as far as it will go towards the ship's side. [This word is much abused and misconstrued in the common phrase and speech of men; for when they encourage a man, as if they would say be of good cheer or be not dismayed or be courageous, they say, *Bear up man*, which in true sense is to go down the wind; and that we use when a man is decaying or out of heart. But the phrase is taken from the manner of doing, which is the putting of the helm *up* to windward, which when you do the ship falls from the wind and goes down the wind.]

Beds. When the decks lie too low from the ports, so that the carriages of the pieces with the trucks cannot mount the ordnance fittingly, but that they will lie too near the port-last, or gunwale, then we make a false deck, for so much as the piece will require for her traversing, to raise it higher, this we call a bed: also in the carriage of the piece, that plank which lies lowermost next the carriage under the breech of the piece, whereon the quoins do lie, is called the bed. [Also when a ship lies aground in soft ooze and hath settled herself as in a bed, we say she hath *made herself a bed*. This is also called docking of herself.]

To **Belay** is to make fast any running rope when it is hauled as much as you would, as the halliards, when you hoist a yard, or the sheets or

tacks, &c., so that it cannot run forth again till it be loosed. [*Belay fast, belay sure*; this we use when we would have them very carefull, for in some cases the slipping of a rope may be the loss of the ship by breaking a yard, coming down or fluttering out a sail, by the rising of the tack, or letting go the sheet.]

A Bend is the outwardmost timber on the ship's side and is also called a wale: [they are easily known by their thickness, which makes them stand farther out than the planks of the ship's sides]. These are the chief strength of the ship's side, to which the futtocks and knees of the beams are bolted, and they are called by the name of the first, second, third, &c., beginning with that next the water.

To **Bend,** or **Bent,** is taken in the common sense; as when the shank of the anchor is with over much straining crooked, we say it is *bent*: but this is otherwise used, as when they say, is the cable *bent*?; that is, when it is seized and made fast to the ring of the anchor. *Unbend* the cable, that is, unbind it, which we do commonly when we make account to be long at sea, before we come into harbour. To *bend* two cables or ropes *together*, that is, to tie them together with a knot, and so to make their own ends fast upon themselves. This is not so sure as splicing two ropes together, but it is sooner done, and most commonly used when we mean to take them asunder again, as when a warp or any rope is too short for the present use.

[A **Berth** is a convenient distance and room to moor a ship in, which being done they say the ship is *well berthed*, intending that no other ships or impediments do hinder her from riding well; also, when they would go clear of a point,

or a rock, they say, *take a good berth*, that is, go a pretty distance off to sea-board of it.]

[**Berthing.** They call the raising and bringing up of ship's sides the berthing of her : as they say, a clincher hath her sides *berthed up*, before any beams be put into her.]

A **Bight.** By a bight is meant any part of a rope, as it is taken compassing ; as when we cannot, or mean not to take the end in hand, be it of a cable, or other small rope being coiled up, we say *give me the bight*, or *hold by the bight* ; that is, by one of the fakes, which lie rolled up one over another in circle-wise compassing.[1]

Bilge or **Bulge.** The bilge of the ship, is the breadth of the floor, whereon the ship doth rest when she is aground. A ship is *bilged*, that is, when she strikes on a rock or an anchor or the like, and breaks some of her timbers or planks there, and so springs a leak.

Bilge-water is the water which, by reason of the ship's breadth and depth, lies in the bilge, and cannot come to the well ; and therefore the Flemish ships, which have generally broader and longer floors than our ships, have, besides the ordinary pumps at the main mast, two bilge pumps, [and those pumps are commonly placed forwards-on by the bitts. When the ship is trimming most ahead, then she holds most bilge].

A **Bittakle** is a close cupboard placed in the steerage before the whip or tiller, wherein the compass doth stand, which is not fastened together with iron nails, but wooden pins, because that iron would draw the compass so that it would never stand true. These are to be so contrived, that they may carry a candle or lamp in them to

[1] The last three words only appear in **B**.

give light to the compass, so as they disperse no light [further], nor yet let any be seen about the ship.

A **Bitter** is no more but a turn of the cable about the bitts, which is used in this kind when we come to anchor in any great tide, or current, or wind, especially in deep water. After the cable is run out a convenient way, we take a turn with it about the bitts that we may by little and little veer it out at ease, for otherwise if a stopper should chance to fail, the cable would run all out, or, as the phrase is, *end for end.* Now this turn of the cable is called a *bitter*, and when the ship is by this means stopped we say the ship is *brought up to a bitter.*

A **Bitter-end** is that end of the cable which is used to be within board, still at the bitts, when the ship rides at an anchor; so that upon occasion when they would have that end bent to the anchor, they say *bend-to the bitter-end*, [which we use when we find that the other end which was bent to the anchor, is worn, fretted or galled].

The **Bitts** are the two main square pieces of timber which stand pillar-wise, commonly placed abaft the manger in the loof of the ship and for no other use but to make fast, and (as it were) to belay the cable unto when we ride at an anchor; the lower part of them is fastened in hold to the riders, but the middle part doth bear [for their better strength], and are bolted, in great ships, to two beams, which cross to the bows of the ships; and therefore sometimes, in extraordinary storms, we are fain to make fast the cable to the main mast for the better relieving the bitts and safety of the bows, which have in great road-steads been violently torn from the after part of the ship.

Blocks are those small wooden things having shivers [1] in them wherein all the running ropes do run. There are divers kinds of blocks; as single blocks, double blocks, and blocks with 3, 4, or 5 shivers in them, and they are called by the names of the ropes whereunto they serve, as the Sheet-block, the Tackle-block, the Fish-block, &c. Note that double blocks do purchase more than single blocks, and therefore in all places where we have occasion to use strength with few hands we have double blocks, as to the tackle of our ordnance. But you must note also that though double blocks purchase with more ease, yet single blocks do purchase faster. When we haul upon any tackle, halliard, or the like, to which two blocks do belong, when they meet and touch we can haul no more, and this we call *block and block.*

Blow. Every one knows when the wind blows, but there are some speeches used at sea, which are not generally understood, as the wind *blows home*, or *blows through*; that is, when the wind doth not cease, or grow less till it come past that place: also *blow through* is sometimes used, when they think the wind will be so great that it will blow asunder the sails. In some places, as I have seen at Santa Cruz [2] in Barbary, the wind being right off the sea and a fresh gale, as much as we could bear our top sails, when we came within less than a league of the road we had little or no wind at all, and it is infallibly ever so. The natural cause whereof I could never find out: for it cannot be the height of the land [which deads the wind], since all that bay is low land, only the Cape, which is not very high; and we know that at the peaks of Teneriff

[1] 'Sheevers.' [2] 'St. Ecruce.'

and Fayal,[1] which are the highest lands in the world, it does the contrary. Nor can it be the heat of the land, which should duller[2] the wind, for this happens there in the winter also; and besides we see the contrary in hotter countries. When a wind increases so much that they cannot bear any topsails, then they use to say that they were *blown into their courses*, that is, could only have out those sails. It *blows* hard, fresh, stiff, high; all words easily known. When they express an extraordinary wind, they say, it will *blow the sail out of the bolt ropes*. If the touch-hole of a piece be gulled[3] much powder will flame out, and that is also called *blowing*.

Bluff or **Bluff-headed**[4] is when a ship hath but small rake forward-on, and is built with her stem as it were upright, which will make her seem as if she had a broad face, like a Venetian Owl. [These commonly are not well wayed[5] ships forward on, for they meet the head sea too full without cutting it by degrees as sharper ships do, yet I have seen of them excellent good ships and fast ships by a wind.]

Board, or **aboard**. By this is not only meant deal boards or the like, but otherwise; for when we use the word *aboard* at sea, it is as much as to say, within the ship. *To go aboard*, that is, to go into the ship. Bring the tack *close aboard*, that is, pull down the tack close to the chesstree or the gun-wale. *Board and board*, that is, when two ships touch each other. The *weather board*, that is as much as to say, to windward. *To make*

[1] 'Fiall.' [2] Moderate; see *Phineas Pett*, p. 94.
[3] Hollowed out.
[4] The remainder is omitted in the printed edition which runs on with the next paragraph, omitting the catchword 'Boat.' [5] 'Wade.'

a board, or as we use to say *to board it up* to a place, is to turn to windward; which we do by standing sometimes one way, sometimes the other, for the gaining a place to windward: in which note that the farther you stand off upon one point of the compass the better board you shall make; and it is better making long boards than short boards if you have sea room. *A long board* is when you stand a great way off before you tack or turn. *A short board* is when you stand off but a little way. *A good board* is when we have got up much to windward, for sometimes we take a great deal of pains and get little, either by reason of a current or tide that may take her on the weather bow, or by reason of a head sea, which may drive her to leeward and hinder her way, or for that the ship may be a leeward ship. Sometimes again when it is a smooth sea, a current under the lee bow and a good ship by a wind, she will get a point or two more into the wind than we expect. Here note that a cross-sail ship in a sea cannot make her way nearer than 6 points unless there be tide or current which doth set to windward. *Within board*; *without board*; *over-board*; *by the board*: all terms obvious to common sense. To leave a land *on back-board* is to leave it astern or behind, for the back-board is that which in boats or skiffs we lean our backs against. In fight, *to board* a ship is to bring the ship to touch the other; where you must note the advantages and disadvantages of every place in boarding, and know that when two ships fight, the defendant may choose whether you shall board him or no, but only in the quarter, which is a bad place to board, for men can worst enter there, in respect that it is the highest part of the ship's hull, and for that there is only the mizen shrouds to enter by; as

also for that ships are hottest[1] there, and men being entered there can do little good and are easily scoured off with murderers from the close fights. The best boarding for entering is, if you can, to board on the bow, for then you may quickly bring all your broadside to; but the greatest advantage for use of ordnance is to board athwart her hawse, for then you may use all your ordnance on one side and she can only use her chase and her prow pieces.

Boat. The boat belonging to a ship is either called the ship's boat or the long-boat, and this is ever intended to be able to carry forth and weigh her sheet anchor. Other smaller boats which they carry for lightness to hoist in and out quickly, are called skiffs or shallops, according to their form. A good long boat will live in any grown sea if the water be sometimes freed, unless the sea break very much. The rope by which it is towed at the ship's stern is called the boat rope, to which, to keep the boat from sheering, we add another, which we call a guest-rope.[2] We do also to save the bows of the boat, which would be torn out with the twitches which the ship under sail would give, use to swift her, that is, make fast a rope round by the gunwale, and to that make fast the boat rope. *Free the boat*, that is, fling out the water: *man the boat*, that is, some men go to row the boat. The *boat's gang*,[3] that is, those which use to row in a boat, which are the cock-swain[4] and his gang, to whom the charge of the boat belongs.[5] *Fend the boat*, that is, save her

[1] *I.e.* the fire of the small-arms is concentrated there.
[2] 'Gestrope.' [3] 'Gingge.' [4] 'Cockson.'
[5] **D** reads: 'which are one of the Boatswain's Mates ever to command her, and such younkers as he shall appoint; for the charge of the longboat belongs to the Boatswain and his mates.'

from beating against the ship's side. *Wind the boat*, that is, bring her head the other way. A *bold boat*, that is, one that will endure a rough sea well. A ship's boat is the very model of a ship and is built with parts in all things answerable to those which a ship requires, both for sailing and bearing a sail, and they bear the same names, as do all the parts of a ship under water, as, rake, run, stem, stern, bow, bilge, &c.

Bolt or **Bolts** are iron pins belonging both to the building and rigging of a ship, of which there are divers kinds, as *ring bolts*, which are of infinite necessary use, both for the bringing to of the planks and wales to the ship, as also the chief things whereunto we fasten the tackles and breachings of the great ordnance. *Drive bolt*, which is a long one to drive out another bolt or trenail by. *Set bolts*, used in the building for forcing the planks and other works together. *Rag bolts*, which are sharpened at one end and jagged that they may not be drawn out. *Clench bolts*, which are clinched with a riveting hammer, to prevent drawing out. *Forelock bolts*, which are made at the end with an eye, whereinto a fore-lock of iron is driven over a ring to keep it fast from starting back. *Fender bolts*, which are made with a long head and beat into the outwardmost bend of the ship to save the ship's sides, if another ship should lie aboard her. Bolts are many times called according to the places whereunto they are used, as *chain bolts*, bolts for carriages and the like. The use of them is so great that without them a ship cannot be built strong, for they bind together all the timbers, knees, and the like, which do strengthen the ship.

A **Bolt-rope** is the rope into which the sail is sewed, or made fast : that is a three-strand rope

made gentle and not twisted so hard as the others, of purpose to be the more pliant to the sail, as also that they may sew the sail into it the better.

Boltsprit. To this is fastened all the stays that belong to the foremast, and fore-topmast, and fore-topgallant, &c., with their bowlines, tacks, besides the rigging which belongs to his particular sails, which are only two : viz., sprit-sail, and spritsail-topsail. If a ship spend her boltsprit, or as the more proper speech is, if the boltsprit drop by the board, the foremast will quickly follow, if it be a rough sea, especially if you go by a wind [for the stay of the foremast is made fast to the boltsprit]. This bears the same proportion for length and bigness as the foremast doth.

A **Bonnet** is belonging to another sail, but is commonly used with none but the mizen, main and fore sails, and the spritsail. I have seen (but it is very rare) a topsail bonnet and hold it very useful in an easy gale, quarter winds, or before a wind. This is commonly one-third as deep as the sail it belongs to ; there is no certain proportion, for some will make the mainsail so deep that with a shoal bonnet, they will clothe all the mast without a drabler : others will make the mainsail shoaler, that they may with foul weather bear it safer, and then the bonnet will be the deeper. *Lace on the bonnet,* or *bring-to the bonnet,* that is, put it to the course : lacing is here very proper, because it is made fast with latchets into the eyelet holes of the sail. Note that when we do speak of the sail in any correspondence to the bonnet, we call it the course, and not the sail : as we say, when a ship hath those sails out, 'course and bonnet' of each : not 'mainsail and

bonnet,' and 'foresail and bonnet.' *Shake off the bonnet*; that is, take it off.

A **Boom** is a long pole which we use commonly to spread out the clew of the studding sail; yet sometimes also we boom out the clew of the main-sail and foresail to spread them out so much the broader to receive more wind. When we say a ship *comes booming* towards us, it is as much as to say she comes with all the sail she can make. Note that booming of sails is never used but quarter winds or afore a wind, for by a wind studding sails and booming the sails is not useful. In coming into harbours where the channel is narrow and crooked, and the land about it over-flown, they use to set poles with bushes, or baskets, at the tops to direct how men should steer along the channel by them: and these are also in many places called booms, but in some others they are called beacons.

The **Bow** is that part of the ship which is broadest before, and begins from the loof till it come compassing about towards the stem. The proportioning of this part is of great importance for the sailing of the ship, for this first breaks off the sea, and is that part which bears all the ship forward on [when she is pressed down with a sail], which is in a manner all the bearing of the ship. If the bow be too broad the ship will not pass easily through the sea, but carry a great deal of dead water before her; if it be too lean or thin, she will pitch or beat mightily into a hollow sea for want of breadth to bear her up, so that there must be a discreet mean betwixt both these. The shaping of this part doth much import the ship's going by a wind; yet I have seen ships of both sorts go well by a wind, but most commonly those that have good bold bows, and

yet it is certain that a ship's way after on is of more importance for her sailing by a wind. A *bold bow* is a broad round bow: a *lean bow* is a narrow thin bow: the *bow piece* is that which lies in the bow.

Bowline[1] is a rope which is fastened to the leech or middle part of the outside of the sail, the use whereof is to make the sail stand the sharper or closer by a wind. The ancients, as it is reported, did ever sail before the wind, the reason whereof I conceive to be because they had not the knowledge and use of this rope. It is fastened by 2, 3, 4, or more parts to the sail, which they call the bowline bridle; only the mizen bowline is fastened to the lower end of the yard. This rope belongs to all sails excepting spritsail and sprit-sail-topsail, which have no place whereby to haul a bowline forward on, and therefore these sails cannot be used close by a wind. *Sharp the main bowline; set taut the bowline; haul up the bowline;* all these are to make it pull up harder, or more properly be hauled more forward on. *Ease the bowline, check* or *come up the bowline,* that is, let it be more slack. [When we sail by a wind as near as we can lie, we usually say, to express it in what manner we did sail, *We went* or *sailed by a bowline;* as much as to say by a wind.]

A **Bower** is any anchor which ships do usually carry at the bow, and from thence hath its name; for our greatest anchors we carry in hold, and for better stowage sometimes unstock them.

Bowse, or to Bowse, is a word they use when they would have men pull together, and is chiefly used by the gunners when they haul upon their tackles to thrust a piece out at a port. They will

[1] 'Bowling.'

cry *Bowse hoa* [1] ; that is, pull more upon the tackle, and then they know to pull together ; and also when there is occasion to pull more upon one tackle than the other, they will say *Bowse upon* that tackle.

[**Braces.** These ropes do belong to all the yards excepting the mizen-yard. They have a pendant which is seized to the yard-arms, for to every yard belongs two braces, and at the end of a pendant a block is seized through which the rope is reeved, which they call the brace, the use whereof is to square the yards and traverse the yards. *Brace the yard* to right, that is, to make it to stand just cross the ship, to make right angles with the length of the ship. All the braces do come afterward on, as the main brace to the poop, the main topsail brace to the mizen top, and so to the main shrouds. The fore and fore-topsail braces, down by the main and main-topsail stays ; and so of the rest. The mizen bowline doth serve for a brace to that yard, but the cross-jack braces are brought forward to the main shrouds when we go close by a wind.]

Brackets are certain little pieces in the nature of knees, which belong to the supporting of galleries or ship's heads.

[**Brails** are small ropes reeved through blocks which are seized on either side the ties, some small distance off, upon the yards, and so come down before the sail and are fastened to the cringles at the skirt of the sail : the use whereof is to haul up the bunt of the sail when we do farthell [2] our sails across, which are in this commodious for a man-of-war that he may instantly

[1] ' Bowes hoe.'

[2] Furl ; derived apparently from ' fardel,' a bundle.

make up his sails and let them fall, if in fight he should fall astern: for note that in fight we desire to use as few sails as we can, both for the trouble in trimming them, for saving our sails, for hiding our sight, and for avoiding of fire which might light in them; and therefore when we say we will strip ourselves into our fighting sails it is meant that we have only the mizen, main-topsail and foresail, with which sails a ship will work every way. These brails do only belong to the two courses and to the mizen. *Haul up the brails* and *brail up the sail* is all one. When merchantmen will seem to brave a man-of-war, if he chase them, they will brail up their sails, which is as much as to make a sign they will fight with them.]

Breaming is when a [boat or] ship is brought aground or on the careen to be trimmed, that is, to be made clean; they burn off the old weeds or stuff which hath gathered filth.[1] This they usually do either with reeds, broom, old ropes or the like, [and then they scrape that stuff, being hot, off with iron scrapers; and so continuing heating the ship they rub the planks as clean as may be with dry mops, that the new stuff wherewith they pay the ship may stick on the better, and the ship be the longer before she be foul again].

Breech and **Breeching.** The breech is the aftermost part of the gun from the touch hole, which is in brass ordnance ever allowed to be as thick as the diameter of the bullet; and those ropes which are bigger than the tackles that do make or lash fast the ordnance to the ship's side, being brought about the breech of the piece, are

[1] **D** reads: 'they burn off the weeds, stuff, filth or foulness which the ship hath gathered under water.'

called *breechings*: these we do not use in fight, but at sea, and chiefly in foul weather.

A **Breeze** is a wind which blows out of the sea and doth daily in all seasonable fair weather keep his course, beginning likely about nine in the morning and lasting till it be within little of night. We do not commonly call all winds that blow off the sea upon any coast breezes, unless it be there where this course is certain, or rarely misses but in storms and foul weather: as for example, here on our coast the winds are never certain, but on the coast of Barbary and other places more southerly they are certain to have the wind off the land all night, and off the sea all day. This breeze is also called a *sea turn.*

[A **Breast-fast** is a rope which is fastened to some part of the ship forward on, and so doth hold fast the ship's head to a wharf or anything else, and a *stern-fast* is the same for the stern.]

[**Breast-ropes** are the ropes which make fast the parrel to the yard.]

A **Budge-barrel** is a little barrel, not altogether so big as a barrel, which holds a hundredweight of powder, and hath a purse of leather made at the head of it which is to shut over the powder to keep it from [danger of] firing. We use to lay[1] ordnance with this in harbour for healths[2] and the like, but at sea we use it not in fight if we can get cartridges,[3] which is the safest way. There are also latten[4] budge-barrels, which are the best.

Bulk. The bulk of a ship is her whole content in hold; as to say, she is a ship of a *great bulk,*

[1] **D** 'load.'

[2] *I.e.* when firing salutes while the health of the King or other important personage is being drunk.

[3] 'Cathrages.' [4] Brass.

that is, will stow much goods. Sometimes it is taken for the merchants goods, as when they say, let our stock go *in bulk* together. *To break bulk* is as much as to say, open the hold, and sell, or part the goods in hold ; as the Indies ships may sell any goods they have betwixt the decks, but they must not break bulk till they have order from the Company, that is, they must not open the hold to meddle with any merchandise therein contained.

Bulkhead is generally any division which is made across the ship with boards, whereby one room is divided from another, as the bulkhead of the cabin, the bulkhead of the half deck, the bulkhead of the bread room, gun room, or the like.

Bunt. The bunt of a sail is, as it were in comparison to the wind, the cod of the net, which receives all the fish, and may as well be called the very bag of the sail ; and therefore we give a bunt to all sails to the intent they may receive much wind, which is the *anima sensitiva* of a ship. If a sail have too much bunt it will hang too much to leeward, and, as they call it, hold much leeward wind [which will hinder the ship's sailing, especially by the wind] ; if it have too little then it will not hold wind enough [before a wind], and so not give the ship sufficient way. The difference is rather perceived in top-sails than the other, for courses are cut square, or at least with allowance of small compass [unless it be at the clew, which some give more or less according to their judgments and pleasure].

Bunt-lines are small lines which are made fast to the bottom of the sails in the middle part of the bolt rope, to a cringle,[1] and so reeved through

[1] 'Creengell.'

a small block, seized to the yard, the use whereof is to trice up the bunt of the sail for the better farthelling and making up of the sail to the yard. [The smaller sails and topgallant sails do not need them.]

[A **Buoy** is that piece of wood, barrel, or the like, which floats right over the anchor and is made fast by the buoy rope unto the fluke of the anchor ; the use whereof is not only to take knowledge where the anchor is, but also by that to weigh the anchor with the boat, which is sooner done than to weigh it with the ship. *Stream the buoy*, that is, before they let the anchor fall whilst the ship hath way, they put the buoy into the water so that the buoy rope may be stretched out straight, and then the anchor will fall clear from entangling itself with the buoy rope, and nothing else belonging to the ship will catch hold of it when it runs down with the anchor. *To buoy up* a cable, that is, to make fast a piece of floating wood, barrel, or the like to the cable somewhat near to the anchor that the cable may not touch the ground. This we use in foul grounds where we fear the cutting or galling[1] of our cables. There are buoys also which do not belong to ships, and these are left at an anchor in the sea to show where any danger is of sands or rocks ; these are especially most needful to be used where the sands do use to alter, or where we can have no fitting landmarks [to direct our course amongst sands, rocks and the like, and in shoal waters where the channels betwixt the sands are narrow.]

[**Buoyant.** When any thing is apt to float above water of its own natural inclination we

[1] Chafing. **B**, 'gawling.'

say 'tis buoyant, be it cask, timber or what else soever. The ship is very buoyant; that is understood when she is not deep in the water, as when she wants ballast or other loading to sink her with the water, and then she will not be stiff enough to bear so much sail as is fit. In this case we also use to say the ship is very *jocant*.[1]]

A **Butt.** By this word taken indefinitely is meant a vessel or cask, as a butt of wine, &c., but in sea language, thus: a *butt* is properly the end of a plank joining to another, on the outward side of the ship under water. To *spring a butt*, that is when a plank is loose at one end, and therefore they bolt, in most great ships, all the butt-heads. By *butt-heads* is meant the end of the plank.

The **Buttock.** The breadth of the ship right astern from the tuck upwards; and therefore according as she is built broad or narrow at the transom or laying out of her stern, we say the ship hath a broad or narrow buttock.

C

A **Cable** is a three-strand rope intended to be sufficient for a ship to ride by at anchor, for otherwise it is counted but a hawser,[2] for a great ship's hawser will make a small ship's cable. Cables have several appellations, as the anchors, and are called the first, second or third, as they grow in greatness, beginning with the last till it come to the sheet-anchor cable. The best cables are those which are made of the whitest stuff, and therefore the Straits cables [cables which

[1] Merry. **H,** 'jovant.'

[2] **B,** 'hassar.'

are bought in the Mediterranean, or the Straits as 'tis commonly termed,] are the best [for they are smaller and will hold much better than our ordinary cables, the only fault is they are so stiff that they will not bitt well] ; the next, the Flemish and Russian[1] ; the last, ours. The making a cable is termed the laying ; as to say, this cable was *well laid*. *Serve the cable* or *plat the cable* is to bind some old rope, clouts, or the like to save it from galling in the hawse. *Splice a cable* is to fasten two cables together with a splice. *Coil a cable* is to lay it up in rolls one above another. *Cable tier* is the cable so laid up in rolls. *Pay more cable,* that is, when they carry out an anchor and cable in the boat, to turn over into the sea some cable that the boat may row the easier, and the cable be slack in the water. *Pay cheap,* that is, fling it over apace. *Veer more cable,* that is, let more go out. *Shot of cable, vide* Shot.

[**Caburn** is a small line made of spun yarn to bind the cables or to make a bend of two cables, or to seize the winding-tackles, and the like.]

A **Calm** and **Becalming** is when, at sea, we have not any wind, and then we add to it these epithetons—*flat, dead,* or *stark-calm.* A calm is more troublesome to a seafaring man than a storm, if he have a strong ship and sea room enough. In some places, as in the Straits, when it is an extraordinary great storm with much wind and a wrought sea, on the sudden there will be no wind, but a flat calm, yet an extraordinary billow which is wondrous troublesome and dangerous ; for then having no use of sail to keep her steady on a side, the great sea will make a ship roll so

[1] **B,** 'Rowsie.'

that unless she be a very fast ship in the water, she will be in danger to roll her masts by the board, or herself under water. *Becalming* is when anything takes away the wind from another; as when one ship is close under the lee of another, the windermost[1] ship doth becalm the leewardmost; also when we are near the land, which keeps the wind from us, we say it doth becalm us.

To Camber, or Cambering. We say a deck *lies cambering* when it is higher at the middle than at either end, and so doth not lie upon a right line. This word is most commonly applied to the ship's keel and beams, and other rounding pieces in the ship's frame. *Camber-keeled* is when the keel is bent in the middle upwards, which happens many times by a ship's uneven lying aground, when either her aftermost part or foremost doth not touch: but the most common cause and the chiefest reason of cambering in great and long ships is the sharpness of the hull afore and abaft and the fullness of their floor amidships, which having more breadth to bear upon the water is harder to sink than both ends before and abaft, which by reason of their sharpness and great weight overhead, their rakes, which overhang the ground-work, sink faster into the water, and so that weight forces the keel and whole work in the midships to give way upwards, which is the main reason of these ships cambering, [and this is the chief cause that the King's ships do decay in the harbour at Chatham with long lying there at an anchor].

The **Cap** is that square piece of timber which is put over the head of any mast, with a round hole for to receive into it the topmast (or flag-

[1] Windward-most.

staff) by which the topmast is kept steady; for if the head of the mainmast be too short, so that the cap stand too near the heel or bottom of the topmast, the topmast will never stand steady; and besides the weight of the topmast will strain the head of the mainmast so much that it will be in danger to spend it, or bear it by the board. Every mast hath a cap, if it carry another (or but a flag-staff), at the top.

Cap Squares are the broad pieces of iron which belong to either side of the carriage of a piece of ordnance, to lock over the trunnions of the piece over which there is made fast an iron pin with a fore-lock [passed through it], the use whereof is to keep the piece from flying or falling out of the carriage when it is shot off, the mouth of it lying very low, or, as the phrase is, under metal.[1]

The **Capstan.** There are two kinds of capstans; the first called the capstan, or the *main capstan*, and is that piece of timber which is ever placed right up and down next abaft the main mast, the foot standing in a step on the lower deck and the head being betwixt the two upper decks. The parts are these—the *foot*, the *spindle*, the *whelps*, the *barrels* and the *holes* for the bars, to which also belongeth the *pawl* of iron. The use of it is chiefly to weigh our anchors and generally to hoist or strike-down topmasts, or to heave in any thing of weight, as ordnance or the like, or indeed to strain any rope that requires great force. The second is a *jeer-capstan*[2] which is placed in the same manner betwixt the main and foremast, the use whereof is chiefly to heave upon the jeer rope, or else to hold off by when

[1] **B,** 'mettle.'

[2] **B,** 'geer.'

we weigh the anchor. At the foot of this there are whelps placed in a lesser proportion, which is to heave upon the voyol[1] for the help of the main capstan in weighing a great anchor. *Come up capstan*, that is, those at the capstan must go backward and slacken the rope or cable which they did heave at. In the same sense they also use these words—*Launch at the capstan*, that is, heave no more; *Pawl the capstan*, that is, to stay it with the iron pawl which, bearing against the whelps, keeps the capstan from turning back.

Capstan Bars are small pieces of timber put through the barrel of the capstan, through square holes of equal length of both sides, by which the men do heave and turn about the capstan.

A Card, or **Sea Card** is a geographical description of coasts, with the true distances, heights and courses, or winds laid down in it; not describing any inland, which belongs to maps. The differences and uses of them will require a long discourse, and they are set down in most books which write of navigation, and therefore I leave them to those books.

Careen. Careening is the best way of trimming a ship under water, both for that the carpenters may stand upon the scaffolds most commodiously to caulk the seams or do any other thing that shall be requisite; also for the saving of the ground timbers, which, especially in ships of great burthen and weight, must needs be much wrung, though they be laid never so strong: besides, it is a most necessary trimming for great ships which are either old or weak built, and also for any ships that have but small floor, and are built so sharp under water that they will be in

[1] **B,** 'voyall'; **D,** 'viall'; often spelt 'viol.'

danger of overthrowing when they shall be brought aground. This *careening* is to be done in harbour, where the slower the tide runs the better : and it is most commonly used in such places, where there are no docks to trim a ship in, nor no good graving places,[1] or else that it doth not ebb so much that a ship may sew dry. For the manner of careening it will be too long and unnecessary to set down all the particulars ; in general, it is thus : they take out all, or leave but little of the provision, ballast, ordnance, or the like, in the ship ; they[2] have a lower ship by her with which she must be hauled down on the side and righted again with tackles, yet with the weight of ballast above, or below in hold, they do effect the chief force of the business and so never strain the ship's masts much. Note that all ships are not of a like condition to careen ; for some ships will be very hard to come down though they have no ballast in them, and those are Flemings, built with two standing strakes : these must have some weight upon the deck to help them down and yet these will right themselves very easy, and therefore need not much in hold to help to right them. Some (as our English built and the like) will come down easy and be hard to right, and therefore we keep somewhat in all these (to right them) in hold ; and having nothing on the deck, some will come down easily and right themselves well. Some will do neither, so that there is not one way for all, but as we see the condition of the ship we fit things and work accordingly. Any kind of bringing the ship over to lie on one side, she being afloat,[3] is called careening, though it be but a

[1] **D,** ' places to grave a ship on.'
[2] **D,** ' and you must.'
[3] **D,** ' on float.'

few strakes; as we say, she was careened three, four or five strakes. If a ship lie down much with a sail they will say, she *sails on the careen.*

Carlings are those timbers which lie alongst the ship from one beam to another, which do not only serve to help strengthen the ship, but on them the ledges do rest whereunto the planks of the deck are fastened.

Carling-knees are those timbers which come thwartships from the ship's sides to the hatchway, which is betwixt the two masts. These do bear upon them the deck on both sides the mast, and on their ends do lie the coamings of the hatches.

A **Carriage** is that whereon we mount our ordnance, the parts whereof are the two *cheeks,* the *axletrees,* the *bolts,* the *cap-squares,* the *hooks,* the *fore-locks,* the *trucks,* and the *linch-pins*[1]; *vide* every one of these in his proper place. The fashion of those carriages we use at sea are much better than those of the land, yet the Venetians [and Spaniards] and divers others use the other in their shipping. [I think it rather for that they want good timber for to make them after the fashion of ship carriages than that they approve more of the field carriages, for only elm doth make them, whereof they have none.] A piece *carries* a shot well, that is, shoots far and right, which is a sign that she is smooth [within] and well metalled.

A **Cartridge** is a bag made of canvas which is reasonable good, being made upon a former, the diameter whereof must be somewhat smaller than the cylinder[2] of the piece, and of such a length or depth as that it shall contain just so much powder as is the charge of the piece. This is wondrous necessary for our great ordnance [in

[1] 'Lins pins.' [2] **B,** 'sillender'; **D,** 'cilinder.'

fight both for speedy lading our ordnance] and also for saving the powder, which is in danger to be fired if in fight we should use a ladle [and carry a budge-barrel about the ship]. These cartridges are many times made of paper, parchment, or the like, but are not so good as the other. There are also other cartridges, or more properly they are to be called *cases for cartridges*, which are made of latten, in which we use to put these other cartridges to bring alongst the ship so much the safer from fire, till we put them into the piece's mouth ; which is a care that in fight there cannot be too much diligence and order used.

[**Carvells** are vessels which go with mizen-sails [1] instead of main-sails. They have three mizens : the main mizen, which belongs to the mainmast ; the after [2] mizen and bonaventure mizen as in some of the King's ships ; but they have foremast and boltsprit rigged in every sort like other ships. These will lie nearer the wind than cross sails, but are not so commodious to handle. We have here little use of them, and therefore I speak not much ; but they are excellent boats by a wind, and chiefly used by the Portugals. There are some of a smaller sort, as many belonging to Peniche,[3] which have only mizens and sail excellently well, and will lie within four points [4] of the wind.]

[**Carvell-work.** The building of ships first with their timbers and beams and after bringing on their planks is called carvell-work to distinguish it from clinch-work.]

A **Case** is commonly made round of wood, hollowed and fit for the bore of the piece, by which

[1] *I.e.* lateen sails. [2] **B,** ' ater ' ; **H,** ' offer.'
[3] ' Penecha,' on the coast of Portugal near Cape Carvoeiro.
[4] **H,** ' a point.'

most conveniently we can put murdering shot into the piece. We likewise use bags to the same purpose, but they are not so convenient as wooden cases, because they are apter to catch hold by the way in the flaws of the pieces : also some call the sheathing of a ship, the *casing* of her.

Case-shot is any kind of old iron, stones, musket-bullets or the like which we put into cases to shoot out of our great ordnance. These are of great use and do much execution amongst men that ply their small shot [upon the upper deck] when we come near or lie board and board.

Caskets [1] are small strings made of sinnet, flat. They are made fast to the upper part of the yards, in little rings which they call *grommets*. Their use is to make fast the sail to the yard when we farthel it up. The biggest and longest are placed just in the middle of the yard betwixt the ties ; these make up the bunt of the sail and are termed the *breast caskets*.

Cat. The cat is a piece of timber fastened aloft right over the hawse, and hath at the end thereof two shivers wherein is reeved a rope with a block, whereunto is fastened a great hook of iron after the manner of a double tackle. The use is to trice up the anchor from the hawse to the top of the forecastle, where it is fastened with a stopper. *Cat the anchor* is to hitch that hook in the ring of the anchor.

Catharpings are small ropes which run in little blocks, like a minim,[2] from one side of the shrouds to the other near the upper [3] deck ; the use whereof is to force the shrouds tauter for the better ease and safety of the mast in the rolling

[1] Now usually spelt ' gasket.'
[2] ' Mynom.'
[3] This word is omitted in **D.**

of the ship. They are only used to the main shrouds and fore shrouds: also at the setting on of the puttocks of the shrouds they are used, but here they are ever made fast and do not run in blocks.

Cat-holes are two little holes above the gun-room ports astern, for this use:—that when we have occasion to heave the ship astern by a stern-fast they bring in the cable, or hawser, by them to the capstan. The stern ports are not so good because they lie not so even with the capstan.

Caulk. Caulking is the driving of oakum,[1] spun hair, and the like into all the seams, rents, and trenails throughout the ship, without the which it is impossible for a ship to be made tight to swim and keep out water.

Chafe or **chafing** is when any rope is galled or fretted; as we say, the cable is chafed in the hawse, or when a rope rubs against anything which is not smooth and even, we say it will chafe the rope.

Chains. By naming the chains of a ship indefinitely is meant those chains to which the shrouds are made fast on the ship-sides; also those which belong to the top-mast shrouds are called chains. In fight we use to sling our yards in chains, for fear lest the ties should be cut and so the yards fall down, and these chains are called *slings*.

Chain-Wales is a broader timber (set on the outside of the ship) than the ordinary wales, and is made so of purpose to spread out the shrouds wider, that they may the better succour the mast, [for the more the shrouds are kept out from the lower part of the mast, by so much the more

[1] 'Ockham.'

power, force, and aptness they have to keep the mast steady, as is obvious and plain to sense].

A **Chamber** is a charge made of brass or iron which we use to put in at the breech of any murderer or fowler, and contains just so much powder as is fit for to deliver away the murdering or case shot contained in that piece: also the *chamber* of a great piece of whole ordnance is counted so far or so much of it as doth contain the whole charge it hath.

Channel. By channel is meant the deepest part of any river or harbour's mouth; as when we say *steer in the channel,* is meant the deepest part of the river. In places where there are loose sands the channels do alter much according to extraordinary winds which come and drive the sands with the sea, sometimes on one side, sometimes on the other; as when I came into Mamora [1] the channel lay E.S.E. and W.N.W., but in two months after, by reason of a fresh shot [2] it changed to lie in E.N.E. and W.S.W., which is five points of the compass [difference]. Sometimes we also call narrow seas channels, as the English Channel betwixt France and England and Saint George's Channel betwixt England and Ireland: but being in those seas, if we say *steer into the channel* it is meant in the middest of the sea.

Charge. We use to say, *charge* a musket, but load or lade a piece of ordnance. A ship of *great charge* is commonly meant by a ship that draws much water, and sometimes for an unwieldy ship that will not wear or steer, for then she is dangerous and chargeable upon a lee shore: also every man's office in a ship is called his *charge.*

Chase. When a man-of-war doth follow any

[1] Mehedia, on the coast of Morocco. [2] Freshet.

ship out of his course, or else when any other ship doth alter her course so as to use all the means they can to fetch up and speak with another ship, we call that *chasing* : and the ship so followed we call *the chase*, as (meaning by her) we say, the chase stands thus, or the chase hath taken in her top-sails, or the chase is struck a hull, &c. There is a great experience and judgment [1] to be used in chasing, for though two men be equally mariners and know how to sail and direct the ship [alike], yet if one be a practical man of war [2] and the other not, the man of war will do much better. The pretence in any chasing is to make the shortest way of it that they can ; which is by judging of the chase's course so to shape yours that you may meet in the nearest angles. There is no certain rule for chasing, for we must many times be ruled by the condition of our ship ; as if the chase clap close by a wind, it being a head sea, and the man of war's ship be a short ship that beats [3] much into the sea, and a leeward ship, then if he clap close by a wind his ship will make no way and therefore he must go a little more large, though he chase under the lee of the other [that he may fore-reach upon]. In chasing we always covet to get to windward in respect that it is advantage in fight, and for that we cannot board a ship, being to leeward ; but sometimes, as if it be towards night, to keep sight of the ship or the like, we must be content to come under his lee and get as near as we can. The *stern chase* ; that is, when we follow her right astern, and she and we go right upon one point of the compass [and

[1] **D** reads : 'There is great skill and judgment (which is gained by practice and experience).'

[2] Here used in its literal and apparently original meaning.

[3] **D, H,** ' bears ' ; **Z,** ' beats off too.'

this is the longest chase, that is the longest time spent before we can fetch her up]: to lie with her fore-foot is the nearest and shortest; that is, as you would say, to lie just across her way, so that both keeping on their courses they shall meet at a certain point. *Chase pieces* are those which lie right forward or right aftward on. When we say that a ship hath a *good chase* indefinitely, it is meant of her chase forward; and that is when she is so contrived that she can carry many pieces to shoot right forward, for to the other they ever use to add the word *stern chase.* The pieces of ordnance which lie right forward on are called chase pieces.

Cheeks are two pieces of timber which are fitted on each side of the mast from beneath the hounds to the upper end of the mast, and they are made of oak to strengthen the mast thereabouts, both for the bearing of the topmast and hoisting the yard. In these are the hounds made for the ties to run in. The knees which fasten the beakhead to the bow of the ship are called *cheeks*: also the sides of any blocks are called the *cheeks.* Likewise the sides of the carriages where the trunnions of the pieces do lie, are called the *cheeks of the carriages.*

Chess-trees are the two small pieces of timber with a hole in them in which the main tack doth run, and to which the tack is hauled down. These are placed a little abaft the loof of the ship; the one on the one side, the other on the other.

Chinching is, as you would say, a slight caulking and is most used when we are at sea and suspect foul weather so that we may take in water at the ports. We use to command the carpenter to *chinch the ports*; that is, to drive a little oakum into the seams of the ports which may

be done, to serve turn,[1] either within board or without board.

Choke. When a running rope sticks in the block either by slipping betwixt the cheek and the shiver; or by any other occasion that anything be got about it; or that it have a kink so that it cannot run and be hauled through; we say the block is *choked*.

[**Clamps** are those thick timbers which lie fore and aft, close under the beams of the first orlop, and do bear them up at either end, and are the same that the risings are to the other decks; *vide* Risings.]

A **Cleat** is a small wedge of wood fastened on the yards to keep any ropes from slipping by where that is fastened. There are also divers other uses of it, as to keep the earing of the sail from slipping off the yard.

Clew. The clew of a sail is the lower corner of the sail, which reaches down to the place where the tacks and sheets are made fast to the sail, and it is counted that part which comes goring[2] out from the square of the sail towards the lower corner. When a sail is much goring then she hath a *great clew*; when a little goring then she hath a *little clew*. When it is cut right square then it hath no clew and yet that lower corner of the sail shall retain the name of the clew of the sail. A ship *spreads a great clew*; that is, hath very broad yards and so spreads much canvas. It is good to allow a good clew to a main sail, for by that means the tack will come the better aboard, and the sheet will come farther aft, whereby the sail will hold more wind.

Clew garnet is a rope which is made fast to

[1] To suffice for the purpose. [2] *Vide s.v.*

the clew of the sail and from thence runs in a block which is seized to the middle of the yard [and so cometh down near the mast to the deck]; the use whereof is when we farthel our main sail or fore sail (for the name of clew garnet doth only belong to the clew lines of those two sails) then this rope doth haul up the clew of the sail close to the middle part of the yard.

Clew-line. This is the same to topsails, top-gallant sails and spritsails that the clew garnet is to the mainsail and hath the very same use. Note in foul weather and gusts, when we take in our topsails we haul home the lee *clew-line* first, because the sail will be taken in so much the easier.

To **Clinch** is to batter or rivet a bolt's end upon a ring, or turn back the end of any nail so as to make it fast at that end which is driven through; we also call that part of the cable which is seized about the ring of the anchor the *clinch of the cable*.

A **Clincher** is a small ship, bark, or boat whose planks and boards are landed over one another and clinched or nailed one through another with nails and roves;[1] whose outsides are berthed or wrought up without timbers framed, as we do in other ships, which work is called carvel work.

Clothe. We say a sail doth clothe the mast when it is so long that it touches the gratings or hatches, so as no wind can go betwixt the sail and the hatches or gratings. We say a ship *spreads much cloth*; that is, when she hath broad sails.

Cloyed. When there is anything got into the touch-hole or breech of the piece so that the priming-powder cannot come to give fire to the rest, we say the piece is *cloyed*.

[1] 'Rooves'; small metal plates on which the nails are clinched down.

Coaks[1] are little square things of brass with a hole in them, put into the middle of some of the greatest wooden shivers to keep them from splitting and galling by the pin of the block whereon they turn.

Coamings. The coamings or coaming of the hatches, or the gratings, is that piece of timber or plank which bears them up higher than the decks so as that they do not lie even with the deck; the uses whereof are to keep the water from running down at the hatches and to give some ease for men to stand upright betwixt the lower decks, if the decks be low and near together; and also in the coamings they may fit holes for to use muskets and to serve for a close-fight.

[**Coats.** Those pieces of tarred canvas which are put above the masts at the partners, and the pumps at the deck, that no water may run down by them, are called coats. The same is used to the rudder-head.]

A **Coil,**[2] or a *coil of ropes* is a rope laid up round, one fake over another; as a coil of cable, that is, a cable coiled up. But sometimes the word coil is taken for a whole rope coiled, so that if half the rope is cut away, they say there is but half a coil of that rope.

To **Coil** is to lay the fakes of a rope round over one another so that when occasion is they may run out smooth without any kinks and also lie handsomely in the ship; and many of the small running ropes, as the braces, topsail halliards, or the like, we hang up at the ship's sides when they are so coiled. It is a manner at sea every night when they set the watch, to coil up all the ropes

[1] **D,** 'cockes.'

[2] 'Quoyle'; in the original placed under 'Q.'

in order that so they may have them all clear to come by in the night, if they have occasion to use any of them.

The **Collar** is that rope which is made fast about the beak-head, whereunto the dead man's eye is seized unto which the main stay is fastened. There is also a rope about the mainmast-head which is called a *collar* or a *garland*, and is there placed to save the shrouds from galling.

The **Comb** is a small piece of timber set under the lower part of the beak-head, near the midst, with two holes in it; and is just in the nature and hath the same use to the fore tacks that the chess-trees hath to the main tacks; which is, to bring the tack aboard.

Compass is that movable instrument with a fly[1] whereon are described the 32 points or winds, by which we direct and steer our courses at sea. The fashion is known to all, and for the uses they are handled at large in many books which write of navigation. There are three kinds; first the plain *meridional compass*, which is the ordinary one; the second a *compass of variation*, which shows the variation of the compass from the true north and south; the third is a *dark compass*, which, being but an ordinary compass in use, is only so called because the fly hath the points described with no colours, as the other are, but only black and white, being most convenient to be seen when we steer by night without any light but only sky-light.

To **Cond** or **Cun.** I think this word comes of *conducere* in Latin, for it imports as much as to lead or direct the ship which way she shall go; it is commonly pronounced thus: *cun the ship*,

[1] Card.

which implies as much as to direct him at the helm how to steer. In long courses when we are off at sea there is not so much heed taken of it, for then they direct their course upon a point of the compass and so let him at the helm look to steer right on that point ; but in chases and narrow channels, where the course lies not directly upon a point of the compass, there the master, mate, or some other standing aloft doth give direction to him at the helm and this we call *conding* or *cunning*. Sometimes he who conds the ship will be speaking to him at helm at every little yaw ; which the sea-faring men love not, as being a kind of disgrace to their steerage ; then in mockage [1] they will say, *sure the channel is narrow he conds so thick*, whereby you may gather that in narrow channels it is necessary and useful to cond thick [because the points and shelves do lie so near that there cannot a long time be given for a ship to run [2] on, lest she should miss working]. Note that according as the ship's sails are trimmed either before or by a wind so they use several terms [in conding]; and to use others were improper and ridiculous amongst them. If the ship go before a wind or (as they term it) betwixt two sheets, then he who conds uses these terms to him at the helm : *starboard, larboard, the helm amidships*. Note that when we say starboard, the meaning is that he must put the helm to the starboard side, and then the ship will go to larboard, for the ship doth ever go contrary to the helm. If the ship go by a wind, or quarter winds, they say *aloof* or *keep your loof*, or *fall not off, wear* [3] *no more, keep her to, touch the wind, have a*

[1] Obsolete form of ' mockery ' ; **H** reads ' mocking.'
[2] **H,** ' come.'
[3] **D, H,** ' veer.'

care of the lee-latch; all these do imply the same in a manner, and are to bid him at the helm to keep her near the wind. *Ease the helm*; *no nearer*,[1] *bear up*; these words do appoint him to keep her from the wind and make her go more large or right before. Some speeches are common to both; as *steady*, that is, keep the ship from going in and out, but just upon the point that you are to steer, and *as you go*, and such like.

Cook Room. The cook room is the place where they dress their victuals, and this room is to be placed in divers parts of the ship according to the ship's employment. In Merchantmen, who must employ all their hold for the stowing of their goods and so stow their victuals betwixt the decks, it is best to have the cook room in the forecastle, especially being contrived in furnaces for the saving of wood in long journeys; as also for that in fight they bring their stern and not their prow to fight, and therefore it will be the less discommodity to them: besides they do not carry so much ordnance forward on, and therefore the weight of the cook room is not so offensive. But in a man-of-war it is most inconvenient to have it in the foreship or forecastle. My reasons these:

(1) It will (be it placed as well as can be) hinder the use of the ordnance.

(2) It will lie over the powder.

(3) Being a man-of-war pretends to fight most with his prow, that part is likeliest to receive shot, which if any chance to come amongst the bricks of the cook room they will spoil more men than the shot; and besides the cook room itself for that voyage is spoiled, there being no

[1] 'no neere.'

means to repair it at sea, and then they must needs use another, so that I think no man of discretion will commend or use that for most sufficient which is most subject to be destroyed and cannot be repaired.

(4) A man-of-war ever carries much ordnance there, and therefore it is fit to avoid (as much as may be) any weight that may charge her foreship.

(5) It is dangerous for firing[1] the ship; for being made up to the ship's sides so that men cannot go round about it, in long continuance and much heating they may fire the ship unawares.

(6) It takes away the grace and pleasure of the most important and pleasantest part of the ship; for any one who comes aboard a man-of-war will principally look at her chase, being the place where the chief offensive force of the ship should lie.

And to conclude, I do not know any commodity it can give to a man-of-war; wherefore in my opinion the best placing the cook room is in the hatchway, upon the first orlop (not in the hold as the King's ships do, which must needs spoil all the victuals with too much heating the hold, or at the least force them to stow it so near the stem and stern that it must needs wrong and wring the ship much and lose much stowage). It being there placed, as it doth avoid all the former inconveniences both of the hold and the forecastle, and yet shall be as serviceable; so hath it this benefit more—that it doth wonderfully well air the ship betwixt the decks, which is a great health unto the company. But if I were to go to sea as a man-of-war I would have no cook

[1] *I.e.* setting her on fire.

room at all but such a one as I would contrive to be removed and struck[1] down in hold if I list; and yet it should waste no more wood than these do, and dress sufficient victuals for the company and roast or bake some competent quantity for the Commander or any persons of quality.

Cordage. All kind of ropes belonging to the rigging of a ship is by a general appellation called cordage.

Counter is the hollow arching part in the ship's stern, betwixt the transom and the lower part of the gallery, which is called the *lower counter*; the *upper counter* is from the gallery to the lower part of the upright of the stern.

Course is taken for that point of the compass which the ship is to sail upon; as to say, the place we must now go to lies East, we then direct our course East. *Alter the course,* that is, sail upon another point of the compass; *mistake the course,* that is, not to know how the land lies or which way to go. Also *main course* and *fore course, mizen course* are the sails without the bonnets. Note all ships of great burden have *double courses* to hold more wind and give the ship more way in a fresh gale, but in an easy gale they hinder, as do all things that are weighty overhead.

A **Crab** is an engine of wood with three claws placed on the ground just in the nature of a capstan, being placed and most commonly used where they build ships for the launching out or heaving in of a ship into the dock or off the quay.

A **Cradle** is a frame of timber brought along the outside of the ship by the bilge, wherein they do launch ships for their greater safety. In

[1] 'Strooken.'

Spain and other places they use to trim all their [great] ships in them.

Craft is any kind of nets or lines or hooks to catch fish, for at sea they will say, when they have lost their lines or nets, that they have *lost their craft.* We all call small vessels as ketches, hoyes, crays and the like, *small craft,* and he that sails in them we say *he uses small craft.*

Crank. We say a ship is *crank-sided* when she will bear but small sail, and will lie down very much with little wind; the cause thereof is that her breadth [1] being laid too low she hath nothing to bear her up when once she begins to heel. We also say she is *crank by the ground* when she cannot be brought aground but in danger to overthrow; the reason whereof is she hath no bilge to bear her, her floor being laid too narrow.

Cringles are little ropes spliced into the bolt-ropes of all sails belonging to the main and fore mast, unto [those which are put to the sides or leech of the sail] the bowline bridles are made fast; and [those which are put to the bottom of the sail are] to hold by when we shake off [or lace on] a bonnet.

Cross-bar is a round shot with a bar of iron (as it were) put through the middle coming out at both ends some 6 or 8 inches more or less. This will not fly so far as a round shot but further than a langrel or chain shot: it is very good to use in fight, for the cutting and spoiling of ropes, sails, yards and masts; as also to do execution amongst men where they stand plying their small shot; but it is not used under water for that it will hardly go through a good ship's sides unless it be used out of very great ordnance.

[1] *I.e.* greatest breadth amidships.

[**Cross-jack** is a yard at the upper end of the mizen mast under the top and there is slung, having no halliards nor ties belonging to it ; the use whereof is to spread and haul on the mizen-topsail sheets.]

Cross-piece is the great piece of timber which goes across the bitt pipes, and is that whereunto we belay the cable.

Cross-trees are those cross pieces of timber which are set on the head of the mast [being bolted] and let into one another very strong. In a general appellation all those four[1] pieces, being so made and put together, are called the *cross-trees,* but in truth and more strictly only those two pieces which go thwart ships are called *cross-trees* and the other which go longst ships are called *trestle trees,*[2] the use whereof is to bear and keep up the topmast ; for the foot of the topmast is fastened in them so that they bear all the stress. These also do bear upon them the tops, and do necessarily belong to all masts which carry any other top or flagstaff at the head.

Crow-feet are those small lines or ropes which stand in 6, 8, 10 or more parts, being so divided and put through the holes of the dead-man's-eye. They are of no necessity, but only set up by the boatswains to make the ship show full of small rigging, and are placed to the bottom of the back stays of the fore-topmast, spritsail-topmast, mizen topmast and the topgallant masts.

Cubbridge-head is the same that is a bulk-head, only that we use this word to the bulkhead of the forecastle and the half deck, which we call the cubbridge head afore or the cubbridge head abaft.

[1] 'Fore.' [2] 'Tressell.'

Culver-tail is a manner of letting one timber into another so as that by no means they can slip out. All the carlings have their ends so let into the beams.

[**Cunting.** The hollow concavity betwixt the strands of the ropes is called the cunting. It is chiefly perceived in three-strand ropes, for ropes made of [many] strands lie smoother together and closer, so that 'tis little perceived. The ties are always made of four-strand ropes because they are smoother to run in the hound than three-strand ropes. Worm the cable in the cunting: vide *Worming*.]

Cut. This word is used in this sense: *cut the sail*; that is, when men are aloft upon the yard, the mainsail or foresail being farthelled[1] up they must let it fall down. When a sail is well fashioned they say it is *well cut*. *Cut the cable in the hawse*; that is most commonly used when we ride in some storm and desire to set sail, but cannot stay the weighing of the anchor for fear of driving too much to leeward, or the like. Generally when upon any occasion we cannot stay to weigh the anchor then we cut the cable in the hawse to save as much as we can of it. In extraordinary occasion, either at an anchor or at sea, we sometimes cut the masts by the board; the cause at an anchor is when the storm increases so that the power which the wind hath upon the rigging and the masts doth force her anchors to come home, or else endanger the breaking of the cable; then they cut down the mast. But if there be only a great sea-gate and little or no wind, then it is to no purpose to cut the masts for they do little or no hurt. This happens in many places where

[1] Furled; **B** 'far'led.'

the wind doth not blow home as at Santa Cruz in Barbary where some have rid such a road [1] that the sea hath broke over their foretop and yet not a breath of wind. At sea they *cut the masts* on these occasions, when an extraordinary gust or storm hath so laid the ship on side that there is no hope that she can right again, and so would quickly be overset or filled with water. Then in cutting the mast, first cut the lee shrouds, for else when the mast is overboard it will be hard cutting them, and the end of the mast may chance to beat out the ship's side. Next cut a little into the weather side of the mast, and then cutting the weather shrouds the mast will instantly and without danger fall overboard. Likewise at sea in a great storm where the ship rolls much, if the partners give way the mast will roll out the ship's sides. In this case also, if they cannot be mended, the mast must be cut by the board.

Cut-water. The cut-water is the sharpness of the ship before, which doth (as it were) cut the water and divide it before it comes to the bow, so that it may come by degrees and not too suddenly to the breadth of the ship, otherwise the ship would beat so full against the water that she would make but little way ; and therefore many times when a ship is too bluff we put-to a false stem, and as it were lengthen her forward on ; and this we call a cut-water, which will not only make her sail better but also make her keep a better wind and not to beat so much against a head sea.

The **Cylinder.**[2] The bore or hollow concave of a piece of ordnance is called the cylinder.

[1] *I.e.* at an anchor.

[2] ' Sillinder ' ; found under ' S,' but in **B** and **Z** only.

D

The **Davit** is a piece of timber having a notch at one end whereon they hang a block by a strap; and this is only used to hang that block on, which is called the fish block, by which they haul up the fluke of the anchor to the ship's bow or loof. It is shifted to either side as they have occasion, and is not made fast to the ship, but laid by till it be used. It is put out betwixt the cat and the loof. *Launch out* or *launch in the davit*; that is, put it out or in. Also the boat hath a davit which is set out over the head of the boat with a shiver into which they bring the buoy rope to weigh the anchor, and it stands in the carlings that are in the boat's bow.

Dead-men-eyes are a kind of blocks wherein there are many holes but no shivers, wherein the lanniers go that make fast the shrouds to the chains. The main stays in some ships are set taut by lanniers in dead-men-eyes, but most great ships use double blocks. The crow-feet do reeve through dead-men-eyes.

[**Dead-water.** The water which is the eddy water at the stern of the ship is called dead-water; and therefore we say a ship *holds much dead-water*, that is which hath a great eddy following her at the stern or rudder, and this may be called dead because it doth not pass away with that life and quickness as the other doth. Note that if a ship hath much dead-water it is a sign that she is not well wayed (? aftward) on, and by this we judge of the ship's sailing, for no ship sails swift or well that hath much dead-water astern.]

Deck. The deck is that floor of plank whereon we place our ordnance. It lies upon the beams. They are called by the name of *first, second* or

third deck, beginning at the lowest: also there is the *half deck*, that is the deck which is from the mainmast to the steerage[1]; and *quarter deck*, which is from the steerage aloft to[2] the master's cabin. There is also the *spar deck*, which is uppermost betwixt the two masts, and is made very slight, with a netting or slight boards towards the sides of the ship, and a grating in the midst. Also the decks are called by the name of *orlops*, as they use to say, the *first* or *second orlop*. A *flush deck*, or as they use to say, a *deck flush fore and aft*; that is, when from stem to stern it lies upon a right line without any fall. Note that the best contriving of a man-of-war is to have [the decks flush and to have] all her ports on that deck on an equal height so as that every piece may serve any port: the reasons are, for that the decks being flush, men may pass fore and aft with much more ease for the delivering powder and shot, or relieving one another, but chiefly for that if a piece or two be dismounted by shot in any place where there is a fall, another cannot be brought to supply its place; besides this discommodity, that by disjoining the equal bearing part of the ship the ship is much weakened, and also it loseth much stowage in the sternsheets: yet there may be some use of these falls to a merchantman for his defence, who may fit a close-fight out of every fall; and though he lose one part of his deck, yet he may still keep more to be gained from him. *The deck cambers*, that is, when it doth not lie flat, but compassing. To *sink a deck*, or to *let fall a deck*, is to remove it and place it lower. To *raise a deck* is to put it higher above water. The making of a deck is termed the *laying of a deck*.

[1] **H** reads 'stern.' [2] **H** reads 'over.'

Deep-Sea-Lead is the lead which is hung at the deep-sea-line to sink it down, the weight whereof is commonly 14 pounds. This has some white hard tallow laid upon the lower end of it which brings up the ground, and so by the differences of the ground we know where and upon what coast we are [it being in such places as the sounding and ground is formerly known]. But in oozy ground we use a white woollen cloth upon the lead with a little tallow, without which cloth the ooze would not stick unto the tallow.

Deep-Sea-Line is a small line with which we sound in deep waters to find ground; and so according to the depth and ground in many known places, as in the coming into our Channel and many other places, when we can see no land yet we know where we are.

[To **Disembogue** is as much as to say, to come out of the mouth of any gulf, which being large within may have some strait or narrow coming out; being used thus:—when they come out of the West Indies betwixt Cuba and Cape Florida, which is the strait whereout the current doth set, they say they *disembogued out* of the gulf; but it is not used for the going out of a harbour or the like.]

To **Dispert.** Disperting is the finding out of the difference of the diameters of the metals betwixt the breech and the mouth of any piece of ordnance, by which we know what allowance to give to the mouth of the piece (being ever less than the breech) that thereby we may make a just shot. There are divers ways, but the plainest is the surest and best, which is by putting in a straw, or small stick, at the touch-hole to the lower side of the concave or cylinder of the piece, and then apply it in the same manner to the mouth

and it will exactly show the difference of the thickness of the metal at the breech and mouth of the piece.

Dock. There are two kinds of docks: a *dry dock*, which is made with flood gates to keep out the tide, in which we build ships and repair them, wherein they sit without danger and harm: the other is a *wet dock*, which is any creek or place where we may haul in[1] a ship out of the tide's way in the ooze; and there, when a ship has made herself, as it were, a place to lie in, we say the ship hath *docked herself*.

A **Drabler,** vide **Bonnet,** for this is in all respects the same to the bonnet that the bonnet is to the course. This is only used when the course and bonnet are too shoal for to clothe the mast. Some small ships which are coasters (and therefore are for most convenience to have short courses) do use two drablers.

Drags. Anything that is hung over the ship in the sea, as shirts, gowns and the like, as also the boat in that respect, all which do hinder the ship's way under sail, are called drags.

Draught. By draught in water is meant so many foot as the ship goes in water. [A ship draws much water, that is, goes deep in water.] A ship of *small draught;* that is, draws but little water. Note that ships of *great draught* are commonly wholesome ships in the sea, and ships of *little draught* commonly go best but roll most. The first is best for a long voyage [if it be not upon a shoal coast], the last for a discovery.

[A **Dredge** is an engine wherewith they take up oysters out of the sea, being made of a frame of iron sharp at the bottom, and a very strong net

[1] **D** and **H** read 'lay.'

of a small compass fastened to it to contain the oysters or anything else which the iron rakes off the ground.]

To **Dredge,** or Dredging, is to take a little grapnel, which being hung over the boat's stern, we let down to drag upon the ground to find a cable which hath been let slip, unto whose anchor there was no buoy; for this, passing along the ground as the boat doth row, will catch hold of it if it meet with it.

[A **Drift Sail** is a sail used under water, being veered out right ahead, having sheets to it; the use whereof is to keep a ship's head right upon the sea in a storm; also it is good where a ship drives in fast with a current, to hinder her driving in too[1] fast; but it is most commonly used by fishermen in the North Sea. The manner of it is thus: fasten the head of it to some yard, and at either clew hang a chamber or some competent weight which may sink the sail downright, but not to be so heavy as to sink the yard.]

Drive. We say a ship drives when we let fall the anchor and it will not hold the ship fast, but that she falls away with the tide or wind; for which we have no help but to veer more cable, for you must note that the more cable is out the faster and surer the ship will ride, or else to let fall more anchors. Also when a ship is a-hull or a-try,[2] we say, she *drives to leeward,* or *drives in with the shore,* and the like, according to the way she makes.

Duck-up. This term is used with the clew-garnets and clew-lines of the mainsail, foresail and spritsail, when as the mainsail or foresail doth hinder his sight forward that steers, or any

[1] **D, H,** 'so.'

[2] Lying to under bare poles (a-hull), or with a minimum of sail set (a-try).

the like occasion. And to the spritsail most commonly when we make a shot with a chase piece, for the clew of the spritsail will hinder the sight, and being not ducked up will be shot away, so then we say, *duck up* the clew-lines.

E

Earing is that part of the bolt-rope which at all the four corners of the sail is left open, as it were a ring. The two uppermost are put over the ends of the yards or yard arms, and so the sail is at those two ends made fast to the yard. Into the lowermost the tacks and sheets are seized, or (as the more proper term is) they are bent unto the clew.

To **Ease.** This word is used in the same sense at sea as otherwise we use the word slack, for generally when we would have any rope slacker and not so hard strained, we say *ease it* ; as *ease the bowlines, sheets,* &c. Only, when the tack should be slackened, the proper term is *let rise the tack,* which is a very fit term in respect that the tack being loosed it rises up from the chess-trees unto which it was hauled close.

An **Eddy** is the running back of the water in some place contrary to the tide, and so falling into the tide again, which happens by reason of some headland or great point in a river coming out suddenly, and so hindering the full passage of the water, which it had in the channel before it came to this point. [So the eddy-water which hangs astern at the rudder of a ship under sail is so much the more by how much the ship is made fuller and her work not carried by even proportions in her run, which is a cause that she cannot sail so swift as otherwise she would.]

An **Eddy-wind** is that wind which recoils or returns back from any sail, house, or the like, going contrary to that wind whence it proceeds, but is never so strong as the other.

End for End. That is a term used when any rope doth run all out of the block so that it is unreeved; or as when a cable or hawser doth run all out at the hawse, which may happen either of purpose to save the cable or by chance when coming to an anchor, if they should miss laying on the stoppers, or that the stoppers should break; then they say the cable at the hawse is *run out end for end.*

Enter. To enter is to come into a ship; but in fight they must be careful to clear the decks with fire pots or the like, if it be possible, from the trains of powder before men do enter, for it happens many times that there are more men lost in a minute by entering than in long fight board and board; and therefore being so dangerous it is fit that men should be well advised first, though many times if a ship is not well provided of close fights it is the speediest and safest way of taking her.

Entering Ladder. Of these there are two sorts; the one which is used by the ship's side in harbour and fair weather, with entering ropes to it; this is all made of wood. The other is made of ropes, with small staves for steps, which is hung over the gallery for entering out of the boat in foul weather when, by reason of the ship's heaving and setting, they dare not bring the boat to the ship's side for fear of staving.

Entering rope is the rope which hangs by the side of the ship in the waist where men do usually come aboard the ship out of a boat, but it is taken generally for any rope which is given a man to enter by.

Eyes. The hole wherein the ring of the anchor is put is called the *eye of the anchor;* also the compass or ring which is left of the strap whereunto a block is seized, is called the *eye of the strap.*

Eylet-holes[1] are those round holes alongst the bottom of those sails unto which do belong the bonnets; and the bonnets have the same for the drablers. They have a little line sewn about them to make them strong, and serve for no other use but to receive into them the latchets of the bonnets, or drablers, with which the bonnet is laced to the course and the drabler to the bonnet.

F

A **Fake** is one circle of any rope or cable that is coiled up round; and so, when we veer out a cable, they many times ask to know how much is left behind within-board: how many fakes are left.

Fall-off. When a ship under sail doth not keep so near the wind as we appoint, we say that the ship *falls off.* This happens many times by the negligence of the steersman; but sometimes the fault is in the ship, which happens either because she may be too light ahead or that her masts may be stayed too forward on, for these two things make a ship's head *fall from* the wind.

Falls. When we mention the falls of a ship (as to say a ship hath a fall, or many falls) it is meant by the raising or laying some part of the deck higher or lower than the other; also the small ropes which we haul by in all tackles is called the *fall of the tackle*; as to say, *overhaul*

[1] **B,** 'Ilett'; **D,** 'Eylot.'

the fall of your main tackle, or *clear the fall* of your tackle. Only the winding tackle hath no fall.

To **Farthell**[1] or **Farthelling** a sail is when we wrap up a sail close together, and so bind it with the caskets to the yard; but towards the yard-arm we use rope yarns, for the sail is not very weighty. This manner we use only to the mainsail, foresail and spritsail.

Farthelling Lines are small lines which are made fast to all the topsails, topgallant sails, and also the mizen yard-arms. The mizen hath but one; the other[2] one, on either side. By these we farthell those sails; but the topsails have not the bunt bound up to the yard as the main and foresails have, but is laid on the top and so bound fast to the head of the mast. This we call stowing the topsail.

[The **Fashion Pieces** are the two timbers which describe the breadth of the ship astern, and are the outwardmost timbers of the ship's stern on either side (excepting aloft where the counter is connected[3]).]

Fathom. A fathom[4] is six foot; which, though every one know, I set down to give notice that we measure the length of all our ropes by fathoms, and not by any other measure, as we do the compass of the ropes by inches, for we say a cable or hawser of so many fathom long or so many inches about; also we reckon in sounding by fathoms.

Fender Bolts: for this *vide* **Bolts.**

Fenders are any pieces of old cables, or ropes

[1] Sometimes spelt 'furthell.' Apparently 'furl' is a contraction of this word.

[2] *I.e.* the topsails and topgallant sails.

[3] **D** and **H** read 'counted.'

[4] 'Fadom.'

or billets of wood, which are hung over the ship's side to keep another ship or boat from rubbing on the ship's side, that they may not break her bends or rub off the stuff when she is new trimmed. Boats have the same to keep them from much beating against the ship's side. In the boat the men have also little short staves which they call fenders: hence we say, *fend the boat*; that is, save her from beating against the ship's side.

Fid is, as it were, an iron pin made tapering and sharp at the lower end, which is for to open the strands of the ropes when we splice two ropes together; but when we splice cables we use fids of wood in the same form and nature but much bigger, which if they were made of iron would be too heavy to work withal. The pin in the heel of the topmast which bears it up on the chess-trees is a fid.

Fid-hammer is a fid made sharp at one end to splice a rope, and a hammer at the other end, with a head and a claw to drive or draw a nail.

Fights. The waist cloths which hang round about the ship to hide men from being seen in fight are called the *fights*; also any bulkhead afore or abaft out of which they may use murderers or small shot, or generally any place wherein men may cover themselves and yet use their arms, are called *close fights*.

Fireworks are any kind of artificial receipts applied to any kind of engine, weapon, or instrument, whereby we use to set on fire the hulls, sails, or masts of a ship in fight; whereof there are many sorts, but the most commonly used at sea are these: *fire-pots, fire-balls, fire-pikes, trunks, brass-balls, arrows with firework,* and the like. To say all that might concerning these,

will require too long a discourse for this that I here pretend.

A **Fish** is any piece of timber or plank which we make fast either to mast or yard, to succour and strengthen it when it is in danger to break. Then we command the carpenter *to fish* the mast or yard; which is done, first hollowing it fit for the place, and then nailing it with spikes[1] and woolding it about with ropes. This fish is very dry meat.

The **Fish** is a tackle hung at the end of the davit by the strap of the block, in which block there is a runner with a hook at the end which doth hitch the fluke of the anchor; and so they haul by the fall that belongs to it, and so raise the fluke to the bow or chain-wale of the ship.

Fish-Block. The block is the block which belongs to the fish and is called the fish-block.

Fish-Hook is the hook which appertains to the fish, and is called the fish-hook.

Flags. These are not only used at sea for distinctions of Nations, or Officers of Fleets (as that the Admiral should have his in the main-top, the Vice-Admiral in the fore, and the Rear-Admiral in the mizentop), but also for distinctions and signs what ships must do, according as they have directions from the Chief Commander; as to chase, to give over, to come to Council, or the like. At sea, to lower or strike one's flag in fight is a token of yielding, but otherwise of great obedience and respect; and to be made to take it in perforce, the greatest disgrace that can be. When they would have the flag out, they say, *heave out the flag*; and *take in the flag*, or *farthell the flag*, that is, to wrap it close about

[1] 'Speekes.'

the staff. To *strike the flag* is to pull it down upon the cap, and so let it hang over loose.

Flare. When a ship is a little housed-in near the water, and above that the work doth hang over again and is laid out broader aloft, they say that the work doth flare over. This makes a ship more roomy within board, for a man-of-war; but it is not sightly, nor by the most common opinion held to be wholesome for a ship; yet I have seen the experience, and am of opinion that it can wrong a ship but little, if her bearing be laid high enough.

Float. We say anything doth float that swims above water, not touching ground; as the ship is *afloat*, that is when it is borne up clear from the ground by the rising of the water. A *floaty* ship is a ship which draws but little water.

Flood. It is flood when the water begins to rise; *young flood, quarter-flood, half*, are all terms commonly known.

The **Floor.** The floor of the ship is so much of the bottom of her as she doth rest upon when she is aground; and therefore those which have long and broad floors lie best and safest with the ground, and the others are crank and dangerous both to wring themselves and to overthrow.

Flow. When the water doth rise or heighten we say it doth flow. But note that it doth ever in all places, seas or rivers, where it flows, flow by the shore before it flows by the offing or middle of the stream, and so it doth ebb by the shore before it doth in the stream likewise; the reason is for that the water is of most force and weight where it is deepest and so is hardlier returned, being once bent [1] any way. When we say it flows

[1] *Cf.* note to *Phineas Pett.* (N.R.S. Vol. 51), p. 128.

at London Bridge, south-west, or at any other place south or west, or as it happens, by this is meant that when the moon is at the full, or else new moon, then upon that day, the sun being in the south-west point, which is three of the clock in the afternoon, it is high water at London Bridge.

Flown. When any of the sheets be not hauled home to the blocks, then they say that *the sheet is flown*; but when they say *let fly the sheet,* that is to let it go amain, or as far as it will. This is most commonly used in great gusts [when we still appoint one to stand at the topsail sheets, to be ready to let them fly if occasion be], for fear of spending the topmasts or oversetting the ship, for the sheet being flown doth hold no wind. I have seen in an extraordinary gust that when the ship hath lain down on the quick side in the water, we have, to make her right again, let fly the sheet, but the gust hath fluttered all the sail to pieces, leaving not any jot, or but some rags in the bolt-ropes.

The **Fluke.**[1] This is the broad part of the anchor which takes hold in the ground; as also those of the grapnels, which have four flukes.

Flush. When a deck is laid from stem to stern without any falls or risings, we say her deck *lies flush,* fore and aft, and this word is not used in any other sense.

The **Fly** is that part of the compass whereon the 32 points of the winds are described; to which underneath is the needle made fast.

The **Fore-foot.** There is no such part of a ship which is termed her fore-foot, but it is a word used in this kind: when two ships sail,

[1] 'Flook.'

so that one doth lie with her stem so much a-weather the other that, keeping their courses, that ship which doth so lie will go out ahead of the other, then we say that she doth *lie with the fore-foot* of the other, as she *stands* or *comes with her fore-foot*; but being so passed out before her ahead, and by her, we do not say she is passed by her fore-foot, but thus, she is gone out ahead; so that this word fore-foot implies no more but one ship's lying or sailing across another ship's way.

Fore-locks are little flat pieces of iron made like wedges, which are put into the holes at the ends of bolts, to keep the bolts from drawing out or slipping back. Also these keep down, and fasten, the cap-squares of the carriages.

Fore-Mast. *Vide* **Mast.**

Fore-reach. When two ships sail together or after one another, she which sails best (that is fastest) doth *fore-reach upon* the other. If two ships sail both one way by a wind, one may keep the better wind, the other may fore-reach; then he that doth fore-reach, if he would speak with the other (as suppose he be a man-of-war, the other a merchant), he must cast about when he is so far fore-reached upon her, that he may lie with her fore-foot.

Fore-Sail. *Vide* **Sail.**

Fore-Top-Mast. *Vide* **Top-Mast.**

Fore-Yard. *Vide* **Yard.**

A Former is a piece of wood turned round, somewhat less than the bore of the piece for which it is made; as a Saker-former, a Minion-former, &c. The use whereof is to make upon it paper cartridges, or linen cartridges, &c.

Foul. When a ship has been long untrimmed, so that grass or any filth be grown or got about

her, she is foul: also when any rope which we should haul is hindered by another or tangled in itself (as topsail halliards, tackle-falls, and the like may be), or anything else so that it cannot run, we say the rope is foul; as the sheets are *foul of* the ordnance; the halliards, clew-lines, or the like, are foul, and so must be cleared before they can be made to run.

Foul Water. When a ship under sail comes into shallow water so as she raises the mud or sand with her way (which she may do though she do not touch the ground, but come very near it) we say she *makes foul water.* Note that a ship in shoal water, when she sails with her keel near the ground, cannot feel her helm as well as in deep water. The reason is for that near the ground the water has not that weight and force as it hath when it is deep; and also by reason of an eddy, which is made betwixt the ground and the bottom of the ship, being so near together, the water cannot come so swift to the rudder as it doth in deeper water. And note also that the swifter the water comes to the rudder the better the ship doth steer, or feel her helm.

Founder. When a ship by an extraordinary leak or else by any great sea that hath broke into her is half full, or full of water, so that we cannot free the water forth, we say, she *is foundered.* The word is significant, for just as a foundered horse cannot go, so a ship which is full, or near full of water, will not feel her helm, that is, will neither wear nor steer, but drive away with the sea, just like a log of wood.

To **Free.** When a ship hath much water in her, we say the pumps will free her, or will not free her. Or when we bale out the water, that is called *freeing the ship.* Also, when the

boat hath water in her we command them to *free the boat.* So that this word free is not used in any other respect about a ship but to get out the water, nor is there any other word used so properly for the getting-out of the water of ship, or boat, as this.

Freshet.[1] When any extraordinary land-water comes down a river suddenly, or else when any great river comes into a sea so as that the water is fresh a mile or two (as in many places it is), we say it is a great freshet.

Fur or **Furred.** There are two kinds of furring: the one is after a ship is built, to lay on another plank upon the sides of her, which is called *plank upon plank.* The other, which is more eminent and more properly furring, is to rip off the first planks and to put other timbers upon the first, and so to put on the planks upon these timbers. The occasion of it is to make a ship bear a better sail, for when a ship is too narrow and her bearing either not laid out enough or too low, then they must make her broader and lay her bearing higher. They commonly fur some two or three strakes under water and as much above, according as the ship requires, more or less. I think in all the world there are not so many ships furred as are in England, and it is pity that there is no order taken either for the punishing of those who build such ships or the preventing of it, for it is an infinite loss to the owners and an utter spoiling and disgrace to all ships that are so handled.

Futtocks.[2] This word is commonly so pronounced, but I think more properly it should

[1] **B,** 'free-shot'; **D,** 'fresh-shott.'
[2] **B,** 'Futhookes.'

be called *foot-hooks*; for the futtocks are those compassing[1] timbers which give the breadth and bearing to the ship, which are scarfed to the ground timbers; and because no timbers that compass can be found long enough to go up through all the side of the ship, these compassing timbers are scarfed one into the other, and those next the keel are called the *lower* or *ground futtocks*, the others are called the *upper futtocks*.

G

Gale. When the wind doth not blow too hard, but reasonably, so that a ship may bear her topsails a-trip we call it (according to the strength of it) either an easy, or loom, gale, which is when it is little wind; a fresh, stiff, strong gale, when it is much wind. Sometimes at sea, two ships being not far asunder, if it be fair,[2] smooth, gentle weather and but little wind, one ship will have more wind than the other; and sometimes the one be flat becalmed, the other have a little breath of wind; then they say, the ship which hath the wind doth *gale away* from the other.

The **Garboard** is the first plank that is brought on the outside of the ship next to the keel.

Garboard-strake is the first strake, or (as you may say) the first seam next to the keel. Here is the most dangerous place in all the ship to spring a leak, for it is almost impossible to come to it withinboard.

Garland. *Vide* **Collar.**

The **Garnet** is a tackle wherewith we hoist in all casks and goods if they be not too heavy (as great ordnance, &c.). It hath a pendant comes

[1] Curving. [2] **D,** 'fine.'

from the head of the mainmast, with a block which is strongly seized to the mainstay just over the hatchway where we use to take in our goods to hold. In this block they reeve the runner, which hath a hook at one end within which we hitch the slings, and at the other a double block, in which we reeve the fall of the runner, and so by that we haul and hoist in the goods. When it is not used it is made fast along by the stay, at the bottom of the stay.

Gauge. We use to gauge our cask that we may see how great it is, or how much is leaked out, which we do by putting down a stick at the bung; and that, by the wetness, will show how much liquor is in it. Also when we would know how much water a ship draws when she is afloat, we stick a nail into a pike or pole and so put it down by the rudder till this nail catch hold under the rudder, and this we call *gauging the ship*. Note that we cannot by this tell exactly how much water she draws; for we must allow for the rake of a ship aftward on; for the pole doth not go down in a perpendicular line, and so many foot as she draws is called the ship's *gauge*. When one ship is to-weather of another, she hath, as they term it, the *weather-gauge*; but they never use to say the lee-gauge.

A **Girding,** *vide* **Trusses.**

[**Girt.** When the cable is so taut that upon the turning of the tide the ship cannot go over it with her stern-post, then she will lie across the tide; and then we say she is girt, which will instantly be undone, if the cable be veered out slack.]

Goose-wing. When we are going before a wind, or quarter-winds, with a fair fresh gale, we many times (to make more haste) unparrell

the mizen-yard, and so launch out the yard and sail over the quarter on the lee side, and so fitting guys at the farther end to keep the yard steady, with a boom we boom out the sheet of the mizen sail. This doth help to give the ship some way, which otherwise the mizen sail will not, especially before a wind. This sail so fitted is called a goose-wing.

Goring. A sail is cut goring when it comes sloping by degrees, and is broader at the clew than at the earing. All topsails and topgallant-sails are so.

Grapnels are in nature of anchors, being used for galleys or boats to ride by; only they differ in form, for a grapnel hath four flukes and never a stock, for it needs none, being that which way soever it fall two of the flukes do ever hold by the ground. In men-of-war we use them that are light to fling into a ship to catch hold on some of her gratings, rails, gunwales, or the like; and so, having a chain made fast unto it, we lash fast the ships together. There are also small grapnels, with three hooks, but not broad like flukes, with which we use to sweep for hawsers or small cables.

Gratings are small ledges laid one across another, like a portcullis or a prison gate. Those which are called *the gratings* are betwixt the main and fore masts, which do serve for a close fight and also for the succour of men either in too hot or too foul weather, with a tarpaulin upon them. There are also in many places of the ship, gratings made for air and light, but chiefly over the ordnance for the vent of the smoke of the powder which comes out of the touch-hole in fight.

To **Grave.** Graving a ship is bringing her to lie dry aground, and then to burn off the old filth and stuff with reed, broom, or the like, and

so to lay on new stuff. Some use only tallow, but that will quickly grow foul; others tallow and soap, which will also quickly grow foul. The most common and best is with train oil, rosin and brimstone boiled together, for this will last longest clean. The laying on of the stuff is called *paying the ship*.

A **Gripe.** The gripe of the ship is the compass and sharpness of the stem under water, especially towards the lower part. The use whereof is to make a ship keep a good wind; and therefore sometimes when a ship will not keep a wind well they put on another false stem to the true stem to make her gripe more.

To **Gripe.** We say a ship doth gripe when she is apt (contrary to the helm) to run her head or nose into the wind more than she should. There are commonly two causes of this: the one, when a ship may be too deep ahead that her head is not apt, by reason of the weight which presses her down, to fall away from the wind; the other may be the staying of her masts, for if she be a short ship and draw much water, if her masts be stayed too much aftward on, it will cause her head still to run into the wind. The Flemings, being generally long floaty ships, do stay all their masts aftward on very much, else their ships would never keep a wind: for it is apparent to sense that all sails from the mainmast aftward on, the farther aft they stand, the more they keep the ship to the wind; as the head sails, the more forward on they stand, the more they have power to flat the ship about from the wind.

Grommets are little rings which are made fast to the upper side of the yard, with staples which are driven into the yard, which have no other use but to tie and make fast the caskets into them.

Ground and **Grounding.** When a ship is brought of purpose to be trimmed on the ground, or otherwise, that is called *grounding the ship*. There are three manners of laying a ship aground ; that is, either laying her head upwards towards the bank and stern towards the offward [or offing], and is termed *laying her pitch-long* to : this is used to ships that are crank with the ground, for this way they take the best advantage for the ship to bear herself. The second is to lay her all alongst the shore and to heel her to the shoreward : this is used to ships which have reasonable good floors and will bear themselves sufficiently well. The third is laying her alongst the shore, and heeling her to the offward : this we use to ships which have great broad and long floors (as Flemings, which have standing strakes) : the reason is for that otherwise we should hardly come to her keel. Some seafaring men are very superstitious of going to sea at certain days, and commonly those hold it good to begin the voyage on Sundays ; and therefore to seem to have begun the voyage that day (though they be not ready to go they will weigh, or (as the term is) trip the anchor, and go a little way, and so come to anchor again : this they call *breaking ground*.

Ground timbers are those timbers which are first laid upon the keel, and so bolted through the keelson into the keel, and are those which make the floor of the ship ; and are therefore called ground timbers because the ship doth rest upon these when she lies aground.

Gudgins are those irons which are made fast to the stern post, into which the pintles of the rudder are hanged.

To Gull. When the pin of a block doth eat or wear into the shiver, it is called *gulling*. Also

when a yard doth rub against the mast, we say it will gull the mast; and therefore to avoid that we put a platt made of sennit to the middle of the yard to keep it from gulling the mast.

The **Gunwale.** That piece of timber which reacheth on either side of the ship from the half deck to the forecastle, being the uppermost bend as it were, which finisheth the upper works of the hull there, and wherein they put the stanchions[1] which support the waist-trees,[2] is called the gunwale whether there be any guns there or not. Also the lower part of any port where any ordnance doth lie, is called the gunwale.

A **Guy** is any rope which is used to keep a piece of ordnance or anything else (the boat or the like) which is hoisted into the ship, from swinging into the ship too fast. When it is over the gunwale to be hoisted in, then by this rope we do ease it in gently, and it is commonly made fast to the stanchions of the waist-trees, and that is called a guy, which word, I think, comes from *guide*, for this doth guide it in. Also there is a rope which is fastened to the foremast at one end, and is reeved through a single block which is seized to the pendant of the winding tackle, and so reeved again through another, which is seized to the foremast somewhat lower than the first part, and this is to haul forward the pendant of the winding tackle, and this rope is called a guy.

H

To **Hail,** or **Hailing.** Hailing of a ship is calling to her to know whence she is, or whither

[1] 'Stanshines.'

[2] Rails along the waist, where there is no bulwark.

she is bound, or any other occasion ; which we do commonly in these words—*O the ship,* or (at sea) no more but *Hoâ,* and the other then answers—*Hayê.* These words are common to all christian seamen to hail each other in. Also sometimes we seem to call to them or salute them with whistles or trumpets, and this is called hailing with trumpets or whistles.

[**Halliards** *quasi* haul-yards, for they are the ropes by which we hoist up all the yards ; only the cross-jack nor the spritsail yard have none, because they are ever slung : yet in small craft they have halliards to the spritsail yard.]

To **Hand,** or **Handing.** When they would deliver away anything to be passed to another, or to have it brought to them, they say, *hand this away,* or *hand me that,* or *hand it along.* So when they want men to hoist or do any labour, they use to call for more *hands ;* not more men.

A **Handspike** is but a wooden lever, which is used instead of a crow of iron to traverse the ordnance, but most especially to the windlass in the boat or ship, which have windlasses to heave up the anchor by.

The **Harpings.** The harpings of a ship is the breadth of her at the bow : also some call the ends of the bends which are fastened into the stem, the harpings.

Hatches are those loose parts, or as it were doors, of the deck which are in the midship before the mainmast, that we open to let down things into the hold, having at each corner a shackle of iron to lift them by.

Hatchway. By the hatchway is meant the place perpendicular over the hatches. When they say lay a thing in the hatchway, that is on the hatches.

To **Haul,** or **Overhaul.** That which others commonly call pulling a rope the seafaring men call ever hauling (as *haul taut* the bowlines, or *haul in* a rope that hangs without board, or the like in any kind). To overhaul is, when a rope is hauled too stiff, or taut, then to haul it the contrary way than it was hauled before, and so to make it slacker.

The **Hawses** are those great round holes, before, under the head, out of which the cables do come when the ship is at an anchor. A *bold hawse* is when they lie high from the water; and this is best, for when they lie low, if there be a great sea, the hawse will still be in the water and take in much water into the ship. *Fresh the hawse;* that is when we suspect that the cable is fretted or chafed, or is like (as many times it will) to burn in the hawse (for there the cable endures the greatest stress), then we veer out a little to let another part of the cable endure the stress. Also when we lay new plats upon the cable in the hawse it is called freshing the hawse. *Clear the hawse*; that is when two cables which come out at two hawses, and by the winding of the ship having some turns one about the other, then the undoing these turns is clearing the hawse, which is necessary to be done, for else the cables will gall one another very much. Any ship or thing that is cross afore the hawse or lies athwart the hawse, or when one ship rides with her stern just afore the other's hawse, they say she rides *upon her hawse.*

A **Hawser** is a three-strand rope and may be called a little cable, for that which is one ship's hawser will be another ship's cable. These serve for many uses, as to warp the ship over a bar. The main and fore shrouds are made of

hawsers, etc. ; only note the difference of the making or laying is the cause of the difference of the names, which to know, *vide* Ropes.

The **Head,** *vide* **Beakhead.** Yet sometimes it is not exactly taken only for the beakhead ; for sometimes they say *ahead,* that is, about the foremast, taking (as it were) all the fore part of the ship for the head.

Head-lines are the ropes of all sails which are uppermost next the yard, by which the sail is made fast unto the yards.

Head-sails are all sails belonging to the foremast, spritsail, and spritsail-topmast ; for these are the sails which govern the head of the ship, to make it fall off, and to keep out of the wind. The head-sails (quarter-winds) are the chief drawing sails.

Head-sea. When it hath been a great storm, the wind (it may be) will suddenly alter 6 points or more, but the sea will go the same way it did for some hours ; then if our course lie to go right against this sea (as we may, the wind being altered) we shall meet this sea right ahead, and so we call it a head-sea. Sometimes also when it hath been but a little wind, there will be a sea, which will come contrary to the wind ; but then, not long after, the wind will come that way, and doth show that on that point of the compass, whenas that sea comes, there has been much wind. Note that generally before any great storm the sea will come that way before any wind, which shows that the sea outruns the wind ; the reason I take to be for that, the sea being a continuate body, one part being moved the wind doth quickly infuse motion to the rest, as we see by the circles which a stone doth make when it is thrown into the water. Note in head-seas all

short ships are bad sailers, for they beat much against the sea; but long ships do go more easily, for they will ride upon two waves at once and fall more gently into the sea.

To **Heave.** As we commonly use the word fling away, so seamen they use the word *heave away*, for if it be but a rope yarn, or chip, they will say, heave it away. *Heave overboard* that rope, yard, or the like. Also the turning about of the capstan is called *heaving* at the capstan. Also when a ship at anchor doth rise and fall with the waves, they say she *heaves and sets.*

The **Heel.** The heel of the mainmast, foremast, or mizen is nothing but that part which is pared away a little, slanting on the aftward side of the foot of the mast, like a heel, to give the mast leave to be stayed aftward on; as the *Flemings* do especially. But the heels of the topmasts are square, and in that they put the fid of the topmast.

To **Heel** is for the ship to lie down on a side, whether she be afloat or aground, and so she heels much or little. She *heels* to starboard or to port. Some superstitious seamen, when they take in goods or victuals for a voyage, if by chance in stowing the provision she heel to the starboard, will say it is a sign of a long and bad voyage, for then they will say she heels from handward,[1] because they take in all their goods on the larboard side. But if she heel to larboard it is sign of a good voyage, and some goods to come in. When she is aground, we say she *heels* to the shore-ward, or to the offward, according as it is.

[1] *Sic*, in all the MSS., but probably the word should be 'landward.'

The **Helm** is that piece of timber which the helmsman doth hold in his hand to steer and govern the rudder by; and one end is made fast to the head of the rudder, but so as that it may be taken off. Though the rudder be the cause of the ship's working, yet the helm is the instrument which governs the rudder, and therefore we impute it all to the helm; as when we say the ship *feels the helm*, or doth not feel the helm; that is, will work and be governed by the helm, or not: for if a ship be very foul or out of her trim, or too deep or too light, many times she will not feel the helm, but sail as if she had none. *Port the helm*; *Starboard the helm*; *Amidship*, or *right the helm*; terms of conding, to direct which way the steersman should put the helm. In smaller ships, under the rate of 500 ton [or thereabouts], they use to put a whip to the other end of the helm and so steer and govern the helm by that.

To **Hitch** is to catch hold of anything with a rope to hold it fast, or with a hook; and we say, hitch the fish-hook to the fluke of the anchor. When we hoist in the boat: hitch the tackles in the ring of the boat; or the garnet in the slings, that is, catching hold of it by the hook to hoist in the goods.

The **Hold.** All the room betwixt the keelson and the first or lower decks, is called the hold; and it is that place where all our victuals, goods and stores do lie; yet it is divided into several rooms with bulkheads, as the Steward's room, the powder room, the boatswain's store, and the like. *Rummage*[1] *the hold; stow the hold; clear the hold; vide* the proper names.

To **Hold-off** is when we heave the cable at

[1] 'Rumidge.'

the capstan. If the cable be very stiff and great, or else have lain in slimy, oozy ground, it surges and slips back, unless that part which is heaved in be still hauled away hard from the capstan, to keep the cable close and hard to the capstan whelps. If it be a small cable, men may do it in their hands; but if great, then either they *hold-off* with nippers or else (as in all great ships) they do bring it to the jeer capstan, and this is called *holding-off*.

Honeycomb. When a piece of iron ordnance (either by being ill cast, or with over much wearing) is rugged and hath little holes in the concave of the piece, she is said to be honeycombed. This is very dangerous for a cross bar shot to catch in, or any ragged shot; as also that some rag of the cartridge or piece of the wad may stick in it and so fire the powder that shall instantly be put in; and therefore we refuse these pieces as much as we may. To try whether a piece be honeycombed, we put in a nail or crooked piece of wire at the end of a staff, and so where that catches we know she is honeycombed; or light a candle on the end of a staff, and that will show all the imperfections of the piece.

The **Hooks.** The hooks of the ship are all those forked timbers which are placed upright on the keel, both in the rake and run of the ship. These do give the narrowing and breadthening of the ship in those parts, according as they are framed, and they are bolted into the keel. The compassing timbers, which are before and do help to strengthen the stem and fore part of the ship, are called *breast-hooks*.

A **Horse** is a rope which is made fast to one of the foremast shrouds with a dead-man-eye at the end of it, through which is reeved the

pendant of the spritsail sheets, and is for no other use but to keep the spritsail sheets clear of the flukes of the anchor [that it should not gall, or be foul of them, when it is hawled or veered]. Also when a man heaves the lead out of the shrouds there is a rope made fast to the shrouds, for him to lean against for falling into the sea. Also they use a rope to set taut the shrouds with wale-knots, one end made fast to the shrouds ; to the other the lanniers are brought, and so with handspike turning it, they set taut the halliards ; this is called a horse. Also those little short ropes which are seized to the middle of the topmast and topgallant stay with a block wherein are reeved the topsail and topgallant bowlines, are called horses.

Housing-in. When a ship, after she is past the breadth of her bearing, is brought in narrow to her upper works, they say she is housed-in. Most are of opinion that the housing-in of a ship makes her the more wholesome[1] in the sea, because the weight of the ordnance and her upper works do not overhang the nail,[2] which as they suppose would make her roll the more ; but I am sure

[1] 'Howlsom.'

[2] This expression, which occurs again on p. 207, is not illustrated in the N.E.D., and no other instance of it can be found. It may be conjectured that the load waterline was marked with nails (an Act of 1677 provides for the marking of the loadline upon the stem and stern of Newcastle keels in this way), and that when a perpendicular from the centre of gravity of any weight on board fell outside this line, such weight was said to overhang the nail. A somewhat similar expression occurs in *Pepys. MS.* 1173 (Fortree : *Of Navarchi*) ; 'Whereas, it is the usual practice of builders to house and draw in all ships from the waterline upwards, conceiving that they are the stronger and more able to support any weight, as guns or the like, being near to the centre : whereas by spreading above, the weight hangs more upon the nail (as they call it).'

it takes away a great deal of room for a man-of-war, and the tack will never come so well aboard as when she is laid out aloft. I have so much experience of both sorts that I am of opinion if two ships be given, *cæteris paribus*, a ship which is laid out aloft, not flaring[1] off but proportionably finished to her other works, shall be the wholesomer ship, for that the counterpoise on either side (the whole weight not so much overhanging the perpendicular of the keel) shall keep her more steady and make her be the longer in fetching over a seel. The reason is the same and will hold proportion in a ship to the walking of a funambulus, who with equal weight will go much more sure if his weight wherewith he doth steady himself be at the end of a long staff, which by reason of the greatness of the circle must have a longer time to come over his perpendicular than if the same were in a shorter staff or in a lump together in his hand, which once inclining either way he hath nothing by which to succour and counterpoise the weight.

To **Hoist.**[2] When they would haul up anything into the ship with a tackle or a dead rope, or get up a yard, they call it hoisting; as, *hoist* the water *in*, *hoist up* the yards.

The **Hounds** are the holes in the cheeks which are fastened to the head of the masts, wherein the ties do run to hoist the yard. The topmasts have but one hole aloft in the head of the mast because they have but single ties, and this is also called the hounds.

The **Hull** is the very body or bulk of the ship; without masts, yards, ropes or sails.

Hulling is when a ship is at sea and hath taken

[1] 'fflayreinge,' 'flairing.'

[2] 'hoise,' 'hoyse.'

in all her sails in calm weather; it is done to save the sails from beating out against the masts. But in foul weather, when they are able to bear no sail, the manner is no more but taking in all the sails and tying down the helm to the lee side of the ship (and so if she be a good conditioned ship she will lie easily under the sea), and thus she makes her way one point afore the beam; that is, if the wind be at west and the ship look south, she will make way east and by south which is one point afore the beam; the beam will bear east and west. It is not yet agreed on amongst all seamen whether it is better for a ship to hull with her topmast up or down: the most received opinion is to have it down, in respect that generally they suppose the weight aloft will make her seel the more dangerously in a storm. But besides the experience which I have seen to the contrary, I can give this reason why it is best in a dangerous and desperate storm to hull with the topmasts up. All seamen will confess that the weather seel is the most dangerous seel and therefore must grant that it is the safest hulling which doth most prevent the danger of that seel. If her topmasts be down when she seels to leeward, the less weight overhead she hath to hinder her from coming and rolling back over again to windward, the faster she will seel over, and the shorter, so that meeting the windward sea so short and suddenly it may endanger to break in and founder her, but if the topmast be up she must needs be the longer in coming up to windward and so meet the sea with more ease that it may have leisure to break away under her; yet it is true she will make the greater lee seel, but in that there is no danger, though to an inexperienced man there may seem to be.

A **Hullock** is a small part of a sail which is loosed and left open in a great storm when we dare not have any more out ; and is only used in the mizen sail when we would keep the ship's head to the sea with a little sail, making all up excepting a little at the mizen-yard-arm. Or else when a ship will not weather-coil, to lay her head the other way, we *loose* (for that is the term) *a hullock* of our fore sail ; and so, changing the helm to the weather side, the ship will fall off and lay her head where her stern lay before.

I, J

The **Jeer** is a piece of a hawser which is made fast to the main-yard and fore-yard of a great ship close to the ties (for small ships do not use it) ; and so is reeved through a block which is seized close to the top, and so comes down and is reeved through another block at the bottom of the mast close by the deck. Great ships have one on one side, another on the other side of the ties. The use of this rope is to help to hoist up the yard, but the chiefest is to succour the ties and to hold the yard from falling down if the ties should break.

The **Jeer Capstan.** This hath its name from the jeer which is ever brought to this capstan to be heaved-at by. It stands in the waist in the hatchway, and serves for many other uses ; as to heave upon the viol, or hold off the cable from the main capstan.

Iron-sick. A ship or boat is said to be iron-sick when the bolts, spikes, or nails are so eaten away with the rust of the salt water that they stand hollow in the planks, and so the ship doth receive in water by them ; and this is the reason

why they put lead over all the bolt heads under water.

A **Junk.** Any piece of cable that is cut off, most commonly any part of an old cable, is called a junk. Such as this they hang for fenders by the ship's sides, or else untwist it and make plats for cables, rope-yarn or sennit, if it be not too old and rotten. If it be old then they make oakum of it.

A **Jury-mast.** When, by occasion of storm or fight, we have lost either the foremast or main-mast we do reserve (if it be possible) the main or fore-yard, which we put down into the step of the mast, and so fasten it in the partners and so take the mizen-yard (or if we have any other which serves for a yard), which fitting with sails and ropes in form of the other, we make a shift with to steer and govern the ship.

K

To **Keckle,** or **Keckling.** We use this term only to the cable and the bolt-rope. When we fear the galling of the cable in the hawse, or the bolt-rope against the quarter of the ship, we turn a small rope round about it, but in manner it differs not from serving of other ropes, though to these this serving is called keckling.

To **Kedge,** or **Kedging.** When in a narrow river we would bring up or down a ship, the wind being contrary to the tide and we are to go with the tide, then they use to set the foresail, or fore-topsail and the mizen, and so let her drive with the tide. The reason of using these sails is to flat her about if she come too near the shore. Also they use a small anchor in the head of the boat with a hawser that comes from the ship; which anchor they let fall in the middle of the

stream, if the ship come too near the shore, and so wind her head about by that, and so lift up the anchor again when she is about: from this use the anchor is called a *kedger*, or *kedge-anchor*.

A **Kedger.** *Vide* Anchor.

The **Keel** is the first timber which is laid of a ship, and is the basis whereon all the rest are fastened; and so much is to be accounted the keel as doth lie in a straight line, at the one end whereof is scarfed in the stem, and at the other is let in the stern post. To this are all the ground timbers and hooks, fore and aft, bolted; and on them all the upper works are raised. A *rank keel* is when a ship hath a deep keel, and this is good to keep a ship from rolling, for if a floaty ship roll too much, that hath but a shoal keel, we put-to another keel under the first, to make it deeper, for that will take some more hold in the water; and this we call a *false keel.*

The **Keel-rope** is a rope which runs alongst the ship upon the keel within the limbers of the ground timbers; one end coming out before, the other abaft. Some will have this of a bass rope, but the best is a hair rope for lasting. The use of it is to clear the limber holes when they are stoaked with ballast, or anything else, so as the water which lies betwixt the timbers cannot come to the well of the pump.

Keelson is the lowest piece of timber within the ship's hold which lies all along upon the ground timbers right over the keel, through which are driven the bolts which fasten the keelson, ground timbers and the keel together.

A **Ketch** is a small boat such as useth to come to Billingsgate [1] with mackerel, oysters, etc.

[1] **D,** 'Belins-gate.'

Kevels are small pieces of timber nailed to the inside of the ship, unto which we belay the sheets and tacks.

Kink.[1] When a rope which should run smooth in the block hath got a little turn, so as it comes double (as it were), this we call a kink. Also the same is in a cable, if it run out doubling in like manner, which happens either by ill coiling of the cable, or by letting it run out too fast; but if it be perceived it is remedied by oversetting the cable, else the cable will gall very much in that place.

The **Knave-line** is a rope, the one end fastened to the cross-trees under the main or foretop, and so comes down by the ties to the ram-head, to the which there is seized a small piece of billet, some two foot long with a hole in the end of it, in which hole this line is reeved and so brought to the ship's side and hauled up taut to the rails; the use whereof is to keep the ties and halliards from turning about one another; which, being new, they would do were it not for this line; but after the halliards and ties are stretched awhile it is taken away, and no more used but on the like occasion.

Knees are those crooked timbers which are so called in respect they represent a man's knee bowing. These do bind the beams and futtocks together, being bolted into both of them. Some do stand alongst ships and some right up and down. You may easily know them in part where they are used, by the form of them.

The **Knights.** There is the *main knight* and the *fore knight*; one standing aft the main, the other abaft the foremast upon the second deck,

[1] 'Keenk.'

being fast bolted to the beams. A knight is a piece of timber wherein are four shivers, three for the halliards and one for the top rope to run in, when they are hoisted. They are commonly carved with the picture of some head upon them, by which they are easily known.

Knittles[1] are two rope yarns twisted together in a knot at each end, to seize a rope, or block, or the like.

Knittlidge. *Vide* **Ballast,** for it is all one.

Knots. There are two sort of knots which are used at sea ; the one is a *bowline knot,* which is so made that it will not slip nor slide. With this knot the bowline bridles are made fast to the cringles, but it is used many other ways. The other is a *wale-knot,* which is a round knot or knob made with the three strands of a rope so that it cannot slip. The tacks, topsail sheets, and stoppers have these wale-knots, and many other ropes.

L

To **Labour.** We say a ship labours in the sea when she rolls and tumbles very much, either a-hull or under sail, or at an anchor. A ship rolls most a-hull when it hath been a grown storm and suddenly the wind ceases, but the seas continue great still ; then she will roll for want of wind. Under sail a ship rolls most right before a wind, but beats most upon a head sea, so that some ships are most dangerous to put afore the sea in a great storm, and weak ships dangerous to beat against the head sea. At an anchor, ships roll and labour most when they lie betwixt wind and tide, which is upon the turning of the

[1] ' Kneetles.'

tide, when the wind and the tide are contrary and neither hath got power to make her strain her cables to ride with her head either to the wind or tide.

To **Lace,** or **Lacing,** is the proper term for putting-to the bonnet to the course, or the drabler to the bonnet: as *lace on the bonnet.* Also we say *lace on the netting* to the roof-trees or the waist-trees.

Ladder. There are three usual ladders belonging to a ship; the *entering ladder* in the waist; a *ladder of ropes,* which hangs out of the gallery for foul weather, and, at sea, to come out of the boat, or go into it; and one at the beakhead which is made fast over the boltsprit to get up upon the boltsprit by. The Venetians and most Levant ships, and also Spanish galleons, have ladders which go into the top and come down abaft the ties, for they seldom go up by the shrouds.

To **Lade** is to fill the ship with goods or provision; for when the hold is full they say she hath her *lading.* Also to charge a piece of ordnance is to *lade the ordnance*; also some say, *lade the water* out of the boat.

A **Ladle** is that wherewith we put the powder into a piece of ordnance, wherein we take the powder out of a budge-barrel. We never use this in fight unless we have spent all out cartridges, for they are both troublesome and not so speedy, and dangerous for scattering of powder.

[**Land-fall** is as much as the falling with the land, as thus: if we say we shall see land such a day, and that it fall out so just according to our reckoning, we say we have made a good land-fall; or if we be mistaken, then we made a bad land-fall.]

Land-locked. When we are in any road or harbour, so that the land lies round about us and the sea lie not any point open upon us, we say we ride land-locked. These are ever good roads and harbours, for no sea can come in to wrong the ship.

[**Land-to.** By this is meant just so far off at sea as we can see the land; as when we direct one to lie off at sea in the height of a Cape land-to, that is so near, and so far off, as he may even just see and discern the land, and no nearer.]

Land-turn is the same off the land that a breeze is off the sea, only differing that the land-turn comes by night, and the sea-turn, or breeze, by day. *Vide* Breeze.

A **Langrel** is a loose shot which goes in with a shackle, to be shortened when it is put into the piece and to fly out at length when it is discharged; with a half bullet either of lead or iron at the either end. This is good shot near hand to use out of our ordnance, to cut down masts, yards, ropes and sails; and also it will do much execution among the men aloft, but it is not used betwixt wind and water for it will not pierce a good ship's sides.

Lanniers are the small ropes which are reeved in the dead-men-eyes of all the shrouds and chains, and the use of them is either to slacken or to set taut the shrouds. Also all the stays belonging to any mast (whether they have blocks or dead-men-eyes belonging to them) are set taut by a lannier. Also the small rope which makes fast the stopper [1] of the halliards to the halliard, is called a lannier.

Large. When a ship goes neither by a wind

[1] **B,** ' topper.'

nor before a wind, but as it were betwixt both [then we say she goes large], that is quartering, and such a wind that carries her so we call a *large wind.*

To **Lash,** or **Lasher.** When we bind anything up to the ship's sides or masts (as pikes, muskets, or a butt to the mast, or the like, as fishes and spare topmasts without board) we call it *lashing-to ;* but the *lashers* chiefly are those ropes which do bind fast together the tackles and breechings of the great ordnance when they are hauled within board. The reason is because the breechings cannot be hauled up taut by hand ; therefore this rope is brought about the breeching and tackles a little before the carriage, right under the piece, and so lashes them fast together.

Lasking. Note that when we say a ship goes *lasking, veering, quarter-winds, large* and *roomer,* it is in a manner all one ; for then they neither go by a wind or before.

Latchets are small lines which are sewn into the bonnets and drabler, like loops, wherewith they lace the bonnet to the course, or the drabler to the bonnet, putting them into the eyelet-holes and so lacing them one over another.

Launch. This word is used instead of *put out,* as we say *launch a ship* out of a dock, or out of the quay ; *launch* the boat ; *launch-out* or *launch-in* the davit ; *launch-out* the capstan bars. Also in another sense when they have hoisted up a yard high enough, or the topmast, they cry *launch-hoa,* that is hoist no more. Also in stowing the hold they will say *launch aft* or *launch forward,* when they would have a butt or the like brought forward or aftward on. Also when they are pumping, if the pump sucks, then they cry, *launch-hoa,* that is, pump no more.

[To **Lay a Land.** When we are sailed out of sight of a land, so that we cannot see it, we say that we have *laid the land*. But if it be so that some other point of land do hinder us from seeing it, then we say that we have shut in, or shut it into, the other point.]

A **Leak.** There is no ship so tight but that with her labouring in the sea (nay though she ride in harbour) she will make some water; but we say a ship is leaky when she makes more water than is ordinary, which is some hundred strokes in twenty-four or forty-eight hours. The causes of leaks are either the starting some trenails [or oozing of some sappy trenails], the opening of the seams; the eating of the worms; [the rottenness of their oakum; the iron sickness of bolts;] or else by receiving some shot under water. The ways of stopping are but two: either within-board, which can hardly be if the leak is low amongst the ground timbers or the hooks, but then the best remedy is to drive down tallow and coals[1] mingled together, raw beef, oatmeal bags or the like; if it can be come at, then it is easily stopped with lead. If it be a shot they drive in a plug with some canvas about it. The other is without board; when it is easily stopped (if it be not too low) by heeling the ship over on the other side, and so nailing lead over it; but if it be low, then to stitch a bonnet (or a netting, which is better) with long rope yarns opened, and so sinking it under the keel to bring it against the leak. The indraught of the water will suck in the oakum, and so stop herself, but this will not continue long. When a ship is leaky, the term is, she hath *sprung a leak*, or she *makes much water*.

[1] *I.e.* charcoal.

The **Ledges** are those small pieces of timber which come thwartships from the waist-trees to the roof-trees [1] to bear up the nettings; and so if there be a grating over the half deck [they are called the same].

Lee. This word is many ways used, but generally the lee is understood for that which is opposite to the wind. The *lee-shore*, that is the shore against which the wind blows; yet to be *under the lee* of the shore is to be close under the weather shore; that is, whence the wind doth come. *A-lee the helm;* that is, put the helm to the leeside of the ship. In conding they use to call him at helm to have a care of the *lee latch*; that is, to look that the ship go not to *leeward* of her course. A *leeward ship* is one that is not fast [2] by a wind, and doth not make her way so good as she might. To *come by the lee*, or to *lay a ship by the lee*, is to bring her so that all her sails may lie against the masts and shrouds flat, and the wind to come right on her broadside, so that the ship will lie, as it were, stark still; or if she make any way it will be with her broadside, right with the beam. The manner of bringing a ship by the lee (if she have all her sails abroad) is to bear up the helm hard to windward, let rise [3] the fore tack, and veer out the main sheet and take in the mizen, or peak it up (which is called spilling [4] the mizen).

The **Leech.** [5] The leech of a sail is the outward side, or skirt of the sail, from the earing to the

[1] **B,** 'ruff-trees'; sometimes spelt 'rough-trees,' but 'roof' seems the more probable derivation. The term 'rough-tree' is used at a later date for an unfinished spar and some confusion has resulted from this.

[2] *I.e.* steady.

[3] **B,** 'rear.'

[4] **B,** 'spelling.'

[5] **B,** 'leatch.'

clew; the middle betwixt which is especially to be accounted the leech.

Leech-lines are small lines which are fastened to the leech of the topsails (for they belong to no other sails) and are reeved into a block at the yard, close by the topsail ties. The use whereof is, when they take in the topsails, to haul in the leech of the sail; and note they ever haul the lee leech-line first, for then the rest will come in with more ease.

The **Lee-fangs** is a rope which is reeved into the cringles of the courses when we would haul in the bottom of the sail to lace on the bonnet. In a strong gale they serve also to help to take in the sail.

Legs. They are called the *legs of the martnets*, and are small ropes put through the bolt-ropes of the main and foresail in the leech of the sail, near a foot of length, and so at either end, being spliced into themselves, they have a little eye whereinto the martnets are made with two hitches, and the end seized to the standing part of the martnets.

Let fall is a phrase generally used for the putting out of any sails when the yards are aloft; but not if the main-yard and fore-yard be struck[1] down, so as that the sails may be loosed before the yards be hoisted. But most properly it is used to the mainsail, foresail and spritsail (for to topsails the more proper term is, *heave out* your topsails, because they do lie in the top) and to the mizen-sail, we say *set* the mizen, and not let it fall.

[**Lie under the sea.** When in a storm we are a-hull and make fast the helm a-lee, so that

[1] 'Stroken.'

the sea breaks upon the bow and broadside of the ship, we say she lies, or is laid, under the sea.]

[**Lifts** are ropes which belong to the yard-arms of all yards, and do only serve to top the yard-arms, that is to make the ends of the yards hang higher or lower, or even, as we list. But the top-sail lifts do serve for sheets to the topgallant yards, as well as for lifts to the topsail yards. The hauling of them is called *topping the lifts*, as *top a-starboard*, or *top a-port*; that is, haul upon the starboard, or larboard, lift.]

Limbers, or **limber holes,** are little square holes cut in the bottom of all the ground timbers and hooks next to the keel, right over the keel, about 3 or 4 inches square. The use whereof is to let the water pass to the well of the pump, which else would lie betwixt the timbers; into these is put the keel rope.

Lins-pins are only used about the trucks of the carriages, to keep on the trucks upon the axle-tree, being little iron pins, just the same that keep on coach wheels.

A **List.**[1] When a ship heels a little to starboard or port, we say she hath a list that way; though this happen by stowing her hold unequally. But most properly a ship is said to have a list to one side or other, when (out of her own mould and making) she hath a kind of inclination to one side more than the other, which happens by the unequal carrying of the works, or it may be by the unequal weight of timbers, for it is a very hard matter to carry a ship's works so even but that there shall be some small difference. I have seen the experience in many ships that, being equally ballasted, they would carry a greater

[1] 'Lust.'

sail, stoop less, and go better upon one tack than upon the other.

Lockers. Any little boxes (or, as it were, cupboards) which are made by the ship's sides, to put in shot by the pieces, or in any other places, are (by a common name) called lockers. We have them to every piece, to have shot lie ready, if on the sudden we should have occasion ; but in fight the shot lies not there, but in a rope made like a ring, which lies flat upon the deck, so that the shot cannot do so much hurt if that another shot should light amongst it. [From hence the beef we keep cold at sea is called locker-beef, for that the cook keeps it in his lockers.]

A **Log-line.** Some call this a minute-line. It is a small line, with a little piece of a board at the end, with a little lead to it to keep it edgelong in the water. The use of it is that by judging how many fathom this runs out in a minute, to give a judgment how many leagues the ship will run in a watch ; for if in a minute there run out 14 fathom of line, then they conclude that the ship doth run a mile in an hour, for 60 (the number of minutes in an hour) being multiplied by 14 (the number of fathom) make just so many paces as are in a mile : so accordingly, as in a minute there runs out more or less, they do by judgment allow for the ship's way. But this is a way of no certainty unless the wind and seas and the course would continue all one, besides the error of turning the glass and stopping the line, both at an instant ; so that it is rather to be esteemed as a trick for a conclusion, than any solid way to ground upon. The manner of doing it is : one stands by with a minute glass, whilst another out of the gallery lets fall the log ; just as the log falls into the

water the other turns the glass, and just when the glass is even out he cries 'stop'; then he stops and reckons how many fathom are run out; so gives his judgment.

The **Loof** of the ship is counted that part [aloft] of the ship which lies just before the chess-trees, as far as the bulkhead of the forecastle; and therefore we call those pieces of ordnance which lie there, the *loof pieces*. *Loof up*, a term in conding the ship; to have him keep her nearer the wind. *Loof into* a harbour, that is, to keep close to a wind, and so go into it. *Keep your loof;* that is, to keep close to the wind. *To spring one's loof;* that is, when a ship is going large, to clap close by a wind.

A **Loof-hook** is a tackle with two hooks; one to hitch into a cringle of the main and foresail, which cringle is in the bolt-rope of the leech of the sail, not far above the clew; and the other to hitch into a strap, which is spliced into the chess-tree, and so to bowse down the sail. The use whereof is to succour the tack in a great gale, that all the force and stress may not bear upon the tack; and also it is used when we would seize the tack surer, or the like.

To **Loom.** The looming of a ship is (as you would say) the very prospective of a ship, for the word is used in this sense. A ship *looms a great sail*; that is, she seems to be a great ship. She *looms but small*; that is, shews or seems to be but a little ship.

A **Loom-gale.** *Vide* **Gale.**

M

To **Man.** We say a ship is *well manned* when she hath men enough to use her ordnance, trim

her sails, and ply a convenient number of small shot; besides chirurgeons,[1] carpenters, and some to hand [along] powder, and other men that are necessary, but not fighters. I mean so as that men being appointed to their charge shall only intend that,[2] though it be true that a man may step from a gun to a rope, or from a rope to use a small shot, and the like, and therefore it may be thought there should not need so many ; yet I would have those things done, as works of supererogation, not as being forced to them, for if necessity then require, whilst the sails are a-trimming, the ordnance or small shot must lie still. What inconvenience the want of sufficient manning is, in a man-of-war, they can best tell who have been experienced in that laboursome fight at sea which many times doth not only last for a day, but two or three. For mine own part, though I might well be ashamed not to know, and dare to do as much with a few men as any other, yet to speak my conscience and tell my mind clearly, were I worthy to command the King's ships in any service, I would rather have twenty men too many than ten too few. A merchantman is counted well manned when he hath double so many men as would else barely sail his ship ; yet commonly they lose their ships rather for want of men than desire to save themselves, for though for a while he may defend himself, yet the man-of-war will be sure of him, if he can have sea room and time enough. When they would have men to go heave at the capstan, they say, *man the capstan* ; also when ships meet and desire to shew all their men, they are commanded to come all up aloft, and this they call

[1] **D** has the modern form, ' surgeons.'
[2] *I.e.* shall confine themselves to that duty.

manning the ship. So when men are commanded to go up into the tops to take in the topsails, they say, *man the top* well, that is a sufficient number of men to go into the top to take in the sail: also *man the boat*.

Man-of-war. I do not mean to describe what a Captain or man who is a man of war is, but a ship of war which is called a man-of-war among seamen, making use of the figure Metonymia (*continens pro contento*). These qualities, commodities and conditions I require in a ship, which I would say should be a right brave man-of-war. 1. She must sail well. 2. Be roomy betwixt the decks. 3. Flush, without any falls for hindering men to pass to and fro at ease. She must bear out her lower tier all reasonable fitting weather, which if she do, the lower she carries them the better. Her chase and bow must be well contrived to shoot as many pieces right forward, and bowing, as may be (for those parts come to be most used in fight). Her ordnance not to lie right over one another, but so as that upon the least yaw of the helm, one piece or other may ever come to bear. And lastly, she must bear a stout sail. Such a ship well manned, with men convenient to ply their ordnance, handle the sails, and use some small shot, were worthy to be called a man-of-war. That ship which wants any of these, is like a soldier who should want either a hand, a leg, or an arm.

The **Manger** is a place made with planks, which are fastened upon the deck right under the hawse, some foot and a half high; and sometimes is made like a triangle meeting at the outward angle aftward, either abaft or before the foremast; the use whereof is only to receive the water which comes in at the hawses when the ship rides

at anchor in great stresses, that the water should not run aft on the decks, and so into hold as it may. Some ships whose hawses lie high, and that do ride easily in the sea, need them not, but others have much use of them.

Marline[1] is a small line made of untwisted hemp to be more gentle and pliant than other lines, and it is also tarred; the use whereof is to seize the ends of ropes from faying[2] out; also they use to seize the sides of the straps at the arse of the blocks together with this; also if a sail be ripped out of the bolt-rope, then if they have haste, or cold weather, so as they cannot sew it in, they take marline, and with that put through the eyelet-holes they make fast the sail to the bolt-rope. This is called *marling* the sail.

Marlin spike is a small spike of iron made of purpose for splicing together of small ropes, and also to open the bolt-rope when they sew in the sail.

Martnets are small lines which are fastened to the legs on the leech of the sail and seem like crow feet, the fall being reeved through a block at the topmast-head and so comes down by the mast to the deck: the martnets of the topsails are in the same manner to the head of the top-gallant mast, but their fall comes no farther than the top, where it is hauled. When they are to haul these martnets, the term is, *top the martnets*: the use of them are to bring that part of the leech of the sail which is next to the yard-arm up close to the yard when we farthel the sail. These most

[1] 'Marling'; 'marling-spike.'

[2] This word is not in N.E.D.; evidently it means 'fraying.' **D** reads 'ffarsing,' and **H** 'fassing,' derived apparently from 'fas,' a fringe. See also p. 200. The word 'fag' is sometimes used in this meaning.

commonly belong to the two courses, yet many great ships have them to the topsails and sprit-sails.

Masts. The masting of a ship is of much importance to the sailing and conditions of a ship, for if she be overmasted, either in length or bigness, it will overcharge the ship and make her lie down too much by a wind, and labour too much a-hull. If she be undermasted (that is, too small or too short), then she loses the benefit and advantage of spreading so much more sail to give her way. There are some differences in the proportioning of masts according to the use of the ship (for those which are to go long voyages are not to be masted according to true proportion, but to be made shorter and bigger than ordinary for fear of spending them in a long journey where they cannot be repaired), but the rule and way whereby we give the true proportion for the length of any mast is to take $\frac{4}{5}$ of the breadth of the ship, and that multiplied by 3 shall give the just number of feet that the mainmast shall be in length; the bigness to be one inch to a yard in length, but more if it be a made mast, for example: Take a ship whose breadth is 30 foot, four-fifths of 30 are 24 foot, so I say that this ship's mainmast must be 24 yards long (for every yard is 3 foot), and 24 inches through, allowing one inch to every yard. The foremast is in length to be $\frac{4}{5}$ of the mainmast, which will be 20 yards lacking one $\frac{4}{5}$ part of a yard and 20 inches through: the boltsprit ever the same in length and thickness with the foremast. The mizen-mast to be half the length of the mainmast, which will be 12 yards long and 12 inches through. And so this is the true proportion for the masts of a ship which is 30 foot broad at the beam, for as

we take the proportion of the length of our yards from the keel, so do we take the proportion of her masts from the beam, or breadth of the ship. A long mast is termed a *taunt mast*; a short mast is termed a *low mast.*

Mats are broad clouts weaved of sennit and thrums together [and some are made without thrums], the use whereof is to save things from galling, and are used in these places:—to the main and fore yards at the ties, to keep the yards from galling against the mast; upon the gunwale of the loof, to keep the clew of the sail from galling there; upon the boltsprit and beak-head, to save the clew of the foresail.

Metal.[1] By speaking of the metal of a piece of ordnance is commonly meant not the quality, but the quantity of that metal whereof it is made: (as to dispert the metal: *Vide* Dispert). When they say the piece is *laid under metal,* that is, with her mouth lower than the breech; or contrary, she *lies over metal* if the mouth lie higher than the breech; and if she lie point blank, then they say, she *lies right with her metal*: so that it seems because the breech hath most metal they do more singularly attribute the word metal to that, than any other part. If a piece have much metal in any part, they say, she is well fortified there, and so contrary.

The **Mizen.** When we say the mizen, it is meant, that we speak of the sail, not of the mast, as *set the mizen,* that is fit the mizen-sail: *change the mizen,* that is bring the yard to the other side of the mast, and so the tack to the other board. And so, *peak the mizen,* that is put the yard right up and down by the mast: *spill the mizen,* that is

[1] 'Mettle.'

let go the sheet and peak it up. The use of the mizen is to keep the ship close to a wind. Note, if a ship gripe too much then we use no mizen, for then she will never keep out of the wind. Sometimes also we use the mizen when we are at an anchor, to back the ship astern, to keep her from fouling her anchor upon the turning of the tide; sometimes also we try with the mizen. Some great long ships require two mizens, then they call that next the mainmast the main-mizen; that next the poop, the bonaventure mizen.

The **Mizen-mast.** *Vide* **Mast.**

The **Mizen-sail.** *Vide* **Sail.**

The **Mizen-topmast.** *Vide* **Topmast.**

The **Mizen-yard.** *Vide* **Yard.**

[**Monk-seam.** This is a kind of sewing the canvases of the sails together, when the edge of the one is sewn over the edge of the other, and so it is sewn on both sides. This is the strongest way of sewing the sails.]

[To **Moor,** or **Mooring.** To moor a ship is to lay out her anchors, as is most fit for the ship to ride by in that place where she is; for there are these kind of mooring: first to *moor across* or *thwart,* which is to lay one anchor on one side of the river and the other on the other, right against, so as both cables (either for ebb or flood) may bear together. Next, to *moor alongst,* that is, to lay one anchor right in the middle of the stream on ahead, and the other astern; and this is where they fear driving ashore, for then both the cables will bear together if she tally[1] in upon either shore. The third is, *mooring water-shot,* that is (as you would say) quartering betwixt both, for this is neither across the tide

[1] **D, H,** 'talee'; **Z,** 'falle.'

nor alongst the tide. When they come into any place, they perceive where, which way, and upon what point of the compass, the wind or sea is likely to endanger them most; and so just there they lay out an anchor, and this they call *mooring for* West, North-west, or as the point is. Note that a ship is not said to *be moored* with less than two anchors aground, yet if she have but one a-ground and a hawser ashore (which is called *a proviso*) we say she is moored with her head to the shore.]

To **Mount.** Mounting a piece of ordnance is taken in two senses; that is, either to put them upon and into their carriages: as we say, the ship's ordnance are not *mounted,* that is, not on their carriages; or else when they are in their carriages and the mouth of her lies too low for the mark, we say, *mount the piece higher.* But if she lie with her mouth too high for the mark, we say, *let fall the piece a little,* not dismount the piece; for *to dismount the piece* is to take it out of the carriage, or that the carriage is not serviceable; as in fight when a shot hath taken, or broken a carriage, we say the piece *is dismounted.*

Murderers are small iron or brass pieces with chambers. In merchant-men they are most used at the bulkheads of the forecastle, half-deck or steerage,[1] and they have a pintle which is put into a stock,[2] and so they stand and are traversed; out of which they use murdering shot to scour the decks when men enter; but iron murderers are dangerous for them which discharge them, for they will scale extremely and endanger their eyes much with them. I have known divers hurt with shooting them off.

[1] **B,** 'steer-reach.' [2] **D, H,** 'socket.'

N

[**Neal-to.** That is, when it is deep water close to the shore (as you would say a bank) that is right up and down without any shoaling.]

Neaps, or **Neap Tide.** When the moon is in the midst of the second and last quarter, then we have neap tides. The etymology of the word I know not, but the meaning of it is this: the neap is opposite to the spring, and there are as many days allowed for the neap or falling of the tides as are for the spring or rising of the tides. These do cause, that where it doth not ever[1] flow high enough, we are forced to stay for the launching and grounding of ships, and also for going over some bar, till a spring. Note, in neap tides the water is never so high nor so low as in the spring tides; also the tide never runs so swift in neaps as it doth at springs. Note that as the highest of the spring is three days after the full, or change of the moon, so the lowest of the neap is four days before the full or change, and then we say it is dead neap. When a ship lacks water so that it doth not flow high enough to bring her off the ground, or out of a dock, we say she is *be-neaped*. So if a ship is within a barred harbour that there lack water to carry her over till the spring, we say she is *be-neaped*.

The **Needle** is that iron wire which is made fast to the fly of the compass, and is that which gives the motion to it, being touched with a loadstone. The best for to receive and retain the virtue of the stone are made of steel, and the best form is to make them round with two small points directing to the North and South, for in

[1] *I.e.* always.

this form they do most equally poise the fly. Who would understand more of these, let him read Dr. Barlow's book of the loadstone,[1] where all things belonging to the needle are most exactly and compendiously set down.

Nettings are those small ropes which are seized together with rope yarns in the form of a net with meshes, and are for the most part only used in the waist (yet I have seen Flemings have nettings over all, from the top of the forecastle over the poop) ; and are stretched upon the ledges, which are placed from the waist-trees to the roof-trees. In merchantmen it is chiefly used having a sail laid over it, for to shadow their men, and for a close fight ; but I think they are in an error, for it is most dangerous for firing, of small defence if men enter, being quickly cut down, and being once torn down (as it may easily with small grapples [2]) it doth cloy all the waist. In a man-of-war it is good to have them for the pleasure and succour of the company [in foul weather or in extreme sunshine], but not to use them in fight.

Netting-sails are the sails which they lay upon the nettings.

Nippers are small ropes (about a fathom and a half or two fathom long) with a little truck at one end (or some have only a wale-knot), the use whereof is to hold off the cable from the main capstan, or the jeer-capstan, when the cable is either so slippy [3] or so great that they cannot strain it, to hold it off, with their hands only.

[1] William Barlow (*d.* 1625), chaplain to Prince Henry and afterwards Archdeacon of Salisbury. He made important improvements in connexion with compasses at sea. His book, *Magnetical Advertisements concerning the property of the Loadstone*, was published in 1616.

[2] **D,** ' grapnells.'

[3] **D,** ' slimie.'

O

Oakum[1] is nothing but old ropes, or others untwisted, and so pulled out as it were into loose flax again ; also, tow,[2] or flax being so employed about a ship is called *white oakum*. The use of it is to drive into the seams and to all parts where they suspect water may come in, as the heads of the trenails, etc. White oakum is best to drive first into the seam, but tarred oakum is best for the outside of the seam next the water. When it is rolled up, so as when the caulker drives it in, it is called a *thread of oakum*. [If a ship open her seams so much that the oakum come out, whereby she becomes leaky, they say she *spews her oakum*.]

To **Observe** is to take the height of sun or star with any instrument, whereby we know in what degree of latitude the ship is. I need not say much of this, for it would require many lines, and it is taught in every book of navigation.

The **Offing.** By this is meant as much as to say out in the open sea, from the shoreward ; as if I be at sea in a ship, the shore on one side of me and on the other side, to sea-board, another ship, she is *in the offing*. So if a ship be sailing into the seaward fromwards[3] the shore, we say she *stands for the offing*. Or when a ship (as in our Channel) keeps in the middle of the Channel and comes not near the shore, we say she *keeps in the offing*.

Offward is a term used when a ship is ashore [and heels to the waterward, fromwards the shore] ; they say, she *heels to the offward*. Or if her stern lie towards the sea, we say her

[1] ' Ockham.' [2] ' toa,' ' towe.' [3] **D,** ' frowards.'

stern lies to the offward, and her head to the shoreward.

Orlop. The Orlop is no other but the deck. As we say the lower deck, the second deck, so you may as well say the *lower orlop*, or the *second orlop*, for this word orlop seems to be appropriated only to these two decks; for if there be a third deck it is never called by the name of orlop, but by the upper, or third, deck.[1]

The **Outlicker** is a small piece of timber (some two or three yards long, as they have occasion to use it) and it is made fast to the top of the poop, and so stands right out astern. At the outward-most end there is a hole, into which the standing part of the sheet is made fast, and so, being reeved through the block of the sheet, is reeved again through another block which is seized to this piece of timber near the end; and so the use of this is to haul down the mizen sheet to it. This is seldom used in great ships, but the cause why in any ship it is used is for that the mizen mast is placed so far aft that there is not room enough within-board to haul down the sheet flat, and so are forced to use this without-board. The small French Burtons and Allowns[2] do use this most of any ships which I have seen, and generally all Newcastle carvels have them.

Overset. When a ship at sea, with bearing

[1] **D** reads: 'for if a ship have three decks they never call the uppermost (which is the third) by the name of orlop, but by the name of deck, as to speak of them they will say she hath a tier of ordnance on the first and second orlop, and also upon the upper deck.'

[2] Burton is apparently a corruption of Breton (*vide Mariners' Mirror*, February 1914): presumably 'allown' (or 'allowner' as it reads in **D, H,** and **Z**), is a similar corruption, but it is difficult to conjecture what the original was; possibly 'Olonne.'

too much sail, is borne over on a side and so foundered in the sea, we say she *was overset.* Sometimes with an extraordinary wind the ship may be overset with nothing but the power which the wind may have over her hull, especially if the wind and current go contrary. I have heard some say that disemboguing out of the Indies by Cape Florida (where the current ever sets very strong to the Northward) that if they have met with a gust at the North, the wind having power over the hull of the ship aloft, and the current setting to windward, having power of the hull alow, they have been in great danger of foundering. Also the turning over of any cable or small rope which is coiled up, is called oversetting ; as *overset the cable,* etc.

Overthrow. When a ship that is brought to be trimmed aground doth fall over on a side, we call it *overthrown,* and not overset ; the reason whereof is her want of floor to bear her upon the ground ; and sometimes it may happen by the indiscretion of those who bring the ship aground, heeling to the offward, if the ground be too steep, whenas they should heel her to the shoreward ; to prevent which, we have no way but to shore her up with her topmast and yard.

Ooze, or **Oozy** is a soft, slimy, muddy ground. This is no good ground to ride at anchor in, for the anchors will not hold here in great stresses ; but the best way to make them hold is to shoe them, and in some places that will not serve neither ; besides this is very bad ground for the rotting of cables. If a man would have a ship lie long aground, it is best laying her in ooze, for there she will lie very soft and easily, for she will quickly dock herself there. It is very bad also for rotting the plank, and the oakum which is in the seams.

P

A **Parbuckle** [1] is a rope which is used in the nature of a pair of slings. It is a rope seized together at both ends, and so put double about the cask to hoist it in by; and the hook of the runner is hitched into it, to hoist it in. This is the quickest way of slinging the cask, but not so sure a way for slipping as the slings.

To **Parcel,** or **parcelling,** is to take a little canvas (about the breadth of a hand) and so lay it over a seam, which is first caulked, and it is most commonly used alongst the ship's sides over the cabins, on the quarter deck over the master's cabin: then heat a little pitch and tar very hot, and pour upon this canvas, and all this together is called *parcelling a seam.*

[**Parrels** are those things made of trucks and ribs and ropes, which go about the mast and are at both ends made fast to the yards; and are so made with trucks and ribs, that the yard may slide up easily. These also, with the breast rope, do hold the yard close to the mast.]

The **Partners** are those timbers which are bolted to the beams and do compass and shut in the mast at the deck; and are the strength that do keep up the mast steady in the step, and also that it should not roll out the ship's sides. There are partners also at the second deck in the same nature, but the mizen hath but one pair of partners. The mast doth use to be wedged fast in these from stirring or wagging, yet I have seen some ships that would not sail well unless the mast were loose and, as they term it, had leave to *play in the partners*; but in a storm

[1] 'Parbunckle.'

it is dangerous to let the mast have any play for fear of wronging the partners, which if they should give way there is no remedy but to cut the mast by the board.

[A **Passarado,** or more properly a *nepas-arceua* [1] rope is any rope wherewith we haul down the sheet blocks of the main and fore-sails when they are hauled aft; the clew of the mainsail to the cubbridge head of the mainmast, and the clew of the foresail to the cat head; and this is done when the ship goes large.]

A **Paunch.** Those mats made of sennit which are made fast to the main and fore-yards, to save them from galling against the masts, are called paunches, by a proper name.

The **Pawl** is a little piece of iron bolted to one of the beams on the deck close to the capstan, but so easily that it hath leave to turn about. This is it against which the whelps of the capstan do bear when they would have the capstan kept fast from turning back again; and therefore they say, *heave a pawl,* that is, heave a little more that the pawl may catch hold of the whelps. This is very necessary sometimes when they heave up the anchor in a great sea-gate, to hold fast lest the force of the sea, jerking [2] up the ship suddenly, should fling men from the capstan. This is called *pawling the capstan,* and when they would have the capstan go back they say, *un-pawl the capstan.*

[1] 'Passaredo.' The etymology of this word is unknown, and Mainwaring's derivation (which is only given in **D** and one or two other MSS.) is unintelligible. Jal does not notice the word in his *Glossaire Nautique,* but gives what is evidently a cognate word, 'Passaro,' used in the Adriatic to denote a lace by which the foot of a sail was made fast to the yard in vessels of the Trabacolo type.

[2] 'Yerking.'

To **Pay** is the same that parcelling is, only wanting the canvas ; for we call it *paying a seam*, when after it is caulked we heat pitch to lay upon the seam to keep it from being pierced with the water. We also use no tar to this. Also, when we grave a ship we call the laying on the stuff (whatever it be, rosin and brimstone and oil, or the like) paying her, for they say, *pay her up to the bends, pay thicker,* or the like. Also when a ship is to tack, and that all her sails are aback-stays (that is, flat against the shrouds and mast, so that we are sure she will not fall back again), we say the ship *is paid,* and then we let rise the tack and haul the sheets, and so come to lay her head the other way.

A-peak. To *heave a-peak* is to heave the hawse of the ship right over the anchor, so that the cable is then a right perpendicular betwixt them. To *ride a-peak* is to have the main-yard and fore-yard hoisted up, and so one end brought down close to the shrouds, the other being raised up ; and so are they done to the contrary sides, the starboard yard-arm of the main-yard coming down to the starboard side, and the larboard of the fore-yard, so the yards seem to cross one another like a St. Andrew cross. The manner of doing it is, for the main-yard, letting go starboard topsail sheets and topping up the larboard lifts ; and so contrarywise for the fore-yard. To *ride a broad peak,* is to ride in the same manner, but the yard must be but half mast high. They never lightly ride in this manner with their yards, but in a river ; the reason : lest, riding with their yards across, some ship might by chance come foul of them and break their yards. Also that room which is in a ship's hold, from the bitts forward on to the stem, is called the *peak,* or *fore-peak*

of the ship. In the King's ships the powder is placed there. Merchantmen place their victuals there outward bound, but other men-of-war,[1] which are full of men, will use it for to lodge some of the company.

Pendants. A pendant is a short rope made fast at one end, either to the head of the mast, or to a yard, or to the clew of a sail, and are in bigness according to the places where they are used; having at the other end a block with a shiver, to reeve some running rope into it: as the pendants of the tackle, which are made fast to the head of the mast; and so the pendants of the back-stays which are there made fast and hang a little way down on the inside of the shrouds. Generally all the yard-arms excepting the mizen have pendants into which the braces are reeved, and by them they are easily known. Also they call those colours which are hung out on the yard-arms, or from the head of the mast, for a show to beautify the ship, *pendants*.

[The **Pillow.** That timber whereon the boltsprit doth bear, and rest on, at the coming out of the hull of the ship aloft by the stem, is called the pillow of the boltsprit.]

A **Pintle** is a small iron pin which is fastened to murderers, as also to harquebusses-à-croc, which is put into a socket or any hole, to keep the piece from recoiling. Also those iron pins which are made fast to the rudder and do hang the rudder to the stern post, being put into iron sockets, are called the *pintles of the rudder*.

Pitching is not only laying pitch upon any place (which yet is more properly called paying) but it is taken also for the placing of the step of

[1] *I.e.* privateers.

a mast ; as they say, the main mast is *pitched* a little too far aft, that is, stands and is placed too far towards the stern of the ship, but it is not meant by the head hanging too far aft. So the foremast is *pitched* too far forth, that is the mast stands too far forward on. Also if a ship fall much into a sea they say she pitches much into the sea ; or if she beat much against the sea, so as to endanger her topmasts with the stroke, they say, she will *pitch her masts by the board.*

Plats are flat ropes made of rope-yarn woven one over another, and are for to save the cable in the hawse from galling. Also we use them on the flukes of the anchor to save the pendant of the fore-sheet from galling against the anchor.

A **Plot** and Sea-Card is all one. *Vide* **Card.** To *prick a Plot* is to note down the traverse of the ship's way and so, comparing it to your observation finding where the ship is ; to make a small prick in the plot in that latitude and longitude where you suppose the ship to be, and so, still keeping account of the days, you shall still see how near or far off you are from the place which you sail to.

A **Point.** The sharpness of any headland is called the *point of the land.* When they say that two points are one in another, that is they are so just in a right line from us, one betwixt the other, that we cannot see the one for the other. Also the compass is divided into 32 *points,* representing 32 winds, so that we call sailing by the compass sailing *upon a point.* They also use to undo the strand at the end of a cable (some two feet long), and so make sennit of the rope yarn and lay them one over another again ; making it less towards the end, and so at the end make them all fast with a piece of marline or the like. This

is called *pointing the cable*; the use whereof is to keep the cable from fassing,[1] but chiefly to see that none of the end is stolen off and cut away.

[The **Poop.** The poop of the ship is the uppermost part astern of the ship's hull, and is the deck over that which is commonly the master's cabin.]

A **Port** is that place out of which the ordnance are put through the ship's sides, and these are to be made so large that the ordnance may have leave to traverse as much bowing and quartering as may be. About 30 inches is the ordinary rate for a port for a demi-culverin.

To **Port** is a word used in conding the ship when she is right before a wind, or if the weather sheet be aft as far as the bulkhead, which is more than quarter winds but not right afore. They will use the word *steady a-port*, or *steady a-starboard*; the ship *heels to port*, bring things *over*[2] *to port*, and the like terms easily understood.

Pouches are small bulkheads made in hold, either thwartships or longst-ships. Those who carry corn, or any such goods that will shoot over from one side to the other, do make many bulkheads, or several rooms (as it were) to keep it up, and these are called pouches. Also when we careen ships there are small bulkheads made some distance from the keelson on either side in the hold, which serve to keep up the ballast when we shift it either for the righting or bringing down of the ship when she is on the careen, and these are also called pouches.

Powder. There are two sorts of powder; the one *serpentine powder*, which powder is dust, as it were, without corning; and this we never

[1] Fraying out. See note on p. 185.

[2] **D, H, Z,** 'near.'

use at sea in ordnance, nor small shot, both because it is of small force, and also, for that it will (with the air of the sea) quickly die and lose its force. The other is *corn powder*, whereof there are two sorts: cannon powder, which is a great corn, and not very strong; the other musket powder, which is the finest, strongest, and best we can get. The ingredients which make the powder are: first, saltpetre, wherein the force of the powder consists; next brimstone, which is apt to flame, and once flamed causes the saltpetre to flame; lastly, coal,[1] which is apt with any sparkle to kindle, but not to flame, yet doth maintain the flame of the other two. The best saltpetre is that which hath no fat; the best brimstone without dross; and the best coal that which is made of the lightest wood. I only touch some chief things of this because there are divers books concerning main conclusions touching the effects of powders in all kinds.

The **Powder-room** is that room in hold where we lay the powder. The greatest care in placing this room must be, to have it farthest from the use of any fire, and freest from the danger of shot.

Predy[2] is a word used amongst them in the stead of ready; as when we come to fight the commander bids them make the ship predy, make the ordnance predy, that is, make them ready for to use in fight. A *predy ship*; that is when her decks are all clear, and the ordnance and all things fitted for fight. Also *make the hold predy* is to lay things out of the way, so as that they may stow the goods in commodiously.

[1] 'Cole'; *i.e.* charcoal.
[2] **D,** 'preddie; **H,** 'preddy.'

A **Preventer Rope**, Vide **Rope.**

Priming is so fitting and filling the touch holes with fine dry powder, and putting in a priming iron to pierce the cartridge, so that powder being fired the powder in the cartridge may likewise fire too; for if the powder in the touch hole is fired and the rest within the piece go not off, we say she was *not primed*, or *not well primed*. For this there is powder made very small and extraordinary dry, and the gunner hath it in a great horn at his girdle in fight, which horn he calls his *priming horn*. Also the first ground or colour which is laid on for others to come over it in painting the ship, is called *priming*.

A **Proviso,** Vide **Mooring.**

The **Prow** is the foremost part of the ship considered aloft, and not alow between the decks or in hold. To *enter into the prow* is to enter in the forecastle. The *prow pieces* are those which lie aloft before. Go forward into the prow, that is, go into the forecastle, before the foremast; and it is most truly understood for that part which is betwixt the chase and the loof.

Puddings are ropes nailed round to the yard-arms of the main and fore-yards close to the end, and so are three or four or more a distance one from another upon each yard-arm. The use of them is to save the robbins[1] from galling asunder upon the yards when we haul home the topsail sheets. Also the serving of the ring of the anchor with ropes, to save the clinch of the cable from galling against the iron, is called the *pudding of the anchor*.

Pulleys are small blocks with one or two

[1] Now usually spelt 'robands.'

shivers in them, and may either be called so, or by the name of small blocks (for great blocks are not usually called by the name of pulleys), as the pulleys of the topsail braces, clewlines, martnets, &c.

Pumps. There are three sorts of pumps used in ships. The first and most common are ordinary pumps such as are used ashore, and these do stand by the mainmast. The next is a burr-pump, which is not used in English ships, but Flemings have them in the sides of their ships, and are called by the name of bilge pumps, because they have broad long floors that do hold much bilge water. The manner of these is to have a staff some six or seven feet long, at the end whereof is a burr of wood whereto the leather is nailed, and this doth serve instead of the box; and so two men standing right over the pump do thrust down this staff, to the midst whereof is seized a rope long enough for six, eight, ten or more to hold by, and so they pull it up and draw the water. This pump doth deliver more water than the former and is not so laborious to pump at. The third and best sort are chain-pumps. These deliver most water and with most ease for the company and are soonest mended if anything fail, having spare esses,[1] if any chance to give way. These have a chain full of burrs and a wheel which makes it deliver so much and go so easily. The term is for pumping, to *pump a spell,* and at ordinary and burr-pumps they reckon by the stroke. As to say, a spell of 200 strokes; but a chain pump, the spells go by glasses. The *pump sucks,* that is draws wind, and hath no water that comes to it. There are

[1] S-shaped links.

also pumps made of a cane, or else of latten which we put down into the cask, to pump up the drink, for at sea, in hold, we use no spigots.[1]

The **Pump-brake** is the handle they pump by in the ordinary sort of pumps.

The **Pump-can** is the can which they draw water in to pour into the pump, and this is a great can.

The **Pump-dale** is (as it were) the trough wherein the water doth run alongst the deck out to the scupper holes.

To **Purchase.** We call the gaining or coming in of a rope by our hauling of it in with our hands, or heaving it in at the capstan, or otherwise, *purchasing.* As the capstan doth *purchase apace,* that is, draws in the cable apace, or the tackles do purchase, and the contrary. When we cannot get in anything or haul it away, we say, we cannot purchase with the rope, tackle, or like. Note that the more parts that any tackle, halliard, or the like do go in, the more easily a man may purchase upon them ; as it is easier to purchase with a block which hath three shivers than with a block that hath but two ; but then this is longer a-doing.

Puttocks are the small shrouds which go from the shrouds of the main, fore, and mizen masts, and also to the topmast shrouds, if the topmast have a topgallant top. The use whereof is to go off the shrouds into the top, for when the shrouds come near up to the mast they fall in so much that otherwise they would not get into the top from them. The puttocks are at the bottom seized to a staff which is made fast there to the shrouds, or some rope which is seized there,

[1] ' Spicketts.'

and above to a plate of iron or to a dead-man-eye, to which the lanniers of the topmast-shrouds do come.

Q

The **Quarter.** That part of the hull of the ship which is from the steerage to the transom, or fashion piece, is called the quarter, or the ship's quarter.

Quarter Deck is that deck which is over the steerage, till it come to the master's cabin.

Quartering is when a piece of ordnance lies so, and may be so traversed, that it will shoot in the same line, or on the same point of the compass, as the quarter bears. Also, when a ship sails with quarter winds, we say, she *goes quartering;* then we let rise the weather tack and haul aft the sheet to the foremost [1] shroud and veer out the lee sheet a little. This way she goes fastest, for now all sails draw together.

Quarter Winds are when the wind comes in abaft the mainmast-shrouds, just with the quarter.

Quoins. There are three sorts of quoins used in a ship: that is, the quoins which the gunners use under their ordnance for to mount them higher or lower; they are made broad, but thinner at one end than at the other, with a handle at the thick end to draw it out or put it farther in, as you have occasion to mount the piece. Pulling out the quoin is termed to *draw the quoin.* Another sort are called *cantic quoins:* these are short—the length of a hand—and are made with three edges; the use whereof is to put betwixt the cask, at the bilge hoops of the cask, to keep the cask steady from rolling

[1] 'Fore-mast.' **D,** 'for-mast of the main shrouds.'

and labouring one against another. The third sort are *standing quoins*, and they are made of barrel boards, some four fingers broad, of a fit length to be driven across betwixt the butts, one end, two or three hoops from the chine hoops of one butt, and the other in the same manner to another, to keep the chine of the butt steady from gaging.[1]

R

Rabbeting is the letting in of the planks to the keel, which is a little hollowed away that the plank may join in the better and closer to the hooks and the keel; and this is only used in the rake and run of the ship, and not in the flat floor; and this hollowing away is called the *rabbet of the keel.*

Rake. The Rake of a ship is so much of her hull as doth overhang both ends of the keel; so that, let fall a perpendicular upon the end of the keel at the setting on of the stem, so much as is without that forward on is her rake forward on. And so in the like manner at the setting in of her stern post, and that is her rake aftward on. Commonly the rake forward on is more than a third, but less than one-half of the length of her keel. There is not any one rule observed amongst all nations, for some give long great rakes, as generally all French built; the Flemings not so much. And for the rake aftward on, it being of no use for the ship but only for to make her ship-shapen (as they call it), they give as little as may be, which commonly is about a fourth or fifth part of her rake forward on. A great rake

[1] Jerking. **D, H, Z,** read 'jogging.'

forward on gives a ship good way and makes her keep a good wind, but if she have not a good full bow it will make her pitch mightily into the head sea; besides, it doth mightily charge the ship because it doth overhang the nail.[1] And if a ship have but a small rake she will commonly be too bluff, and so meet the sea too suddenly upon her bows, which will hinder her going through much. The longer a ship's rake is, the fuller must be her bow. The best conditioned ships have neither too much nor too little.

Ram-head. The ram-head is a great block with three shivers in it, into which are reeved the halliards, and at the head of it into a hole are reeved the ties. This block doth only belong to the main and fore halliards.

A **Rammer** is a staff with a round piece of wood at the end of it, the outwardmost being flat, somewhat less than the bore of the ordnance to which it doth belong; and this is to drive home the powder close to the breech of the piece, and so the shot to the powder, and the wad to the shot, and that is called *ramming home* the powder or shot.

Ranges. There are two; the one aloft upon the forecastle a little abaft the foremast, the other in the beakhead before the wooldings of the boltsprit: that in the forecastle is a small piece of timber which goes over from one side to the other, and there is fastened to two timbers, and in the middle, on either side the foremast, two knees, which are fastened to the deck and this timber, in which run the topsail sheets in a shiver, and hath divers wooden pins through it to belay ropes unto (as the foretacks, fore-topsail

[1] See note on p. 166.

sheets and fore bowlines, the fore loof-hook), and that in the beakhead is in the same form, whereunto is belayed the spritsail lifts, the garnet of the spritsail, and other ropes belonging to the spritsail and spritsail-topsail.

Ratling is a line wherewith they make the steps by which we go up the shrouds and the puttocks, and so the topmast shrouds in great ships ; and these steps, which make the shrouds look like ladders, are called the ratlings of the shrouds.

A **Reach** is the distance of any two points of land which bear in a right line to one another, which term is most commonly used in rivers ; as Limehouse Reach, Greenwich Reach, Long Reach, and the like ; the reach being counted so far as you can see the reach to lie in a straight line. Also some call the distance and crossing betwixt Cape Verde and the first islands, entering to the West Indies, Long Reach.

To **Reeve.** The word is used just in the same sense, in respect of ropes, that putting in or putting through or passing through would be, but they ever use this word reeve ; as when we would express that the tack is put through the chess-trees, we say it is *reeved through*, or instead of putting a rope through a block, we say *reeve it* in that block (as the halliards are reeved in the knights and ram-heads) ; and it is generally to be understood and applied to all ropes that pass through blocks, dead-men-eyes, chess-trees, and the like. And so when we would have that rope pulled out of the block, etc., we say, *unreeve* that rope ; or the braces, lifts, sheets, etc., are *unreeved*.

Ribs. By a resemblance that the timbers (that is the futtocks) of a ship have when the planks are off to the ribs of a dead carcase, we

do in that kind call all those timbers by a general appellation, the ribs of the ship, though otherwise they have particular names; as if two ships in a sea-gate lie aboard one another and break with her weight some of the other's futtock timbers, they will say, she hath *broke some of her ribs*. Also those little long wooden pieces which are made with holes, like the comb under the beakhead, and do belong to the parrels of the yards, are called the *ribs of the parrels*.

To **Ride.** We say a ship rides whenas her anchors do hold her fast so as that she doth not drive away with the tide or wind; for though she sheer from one side to the other, yet if her anchors do hold fast and come not home we say she *rides*. To *ride a great road;* that is, to ride where the sea and wind have much power over the ship and strain the cables very hard. Note a ship rides easiest and with more security having but two cables spliced together (which they call a *shot*) than she will by three single cables; for the length of the shot will give her more scope to play and rise upon the sea with ease; for by reason also of the weight, the ship can hardly strain it: for when a great sea comes to jerk up the ship, the shot is so long afore it comes to straining that the force of the sea will be past before it can come up to bear so much stress as a shorter cable would do. The deeper the water is, the worser it is to ride, and requires much more cable in proportion than shoaler water. For though in shoaler water the sea will break more, yet it hath not that power and weight which the deep water hath. When we ride any extra-ordinary road we strike down our topmasts and bring our yards alongst-ships, in much wind especially. To *ride across* is to ride with

our main-yards and fore-yards hoisted up to the hounds, and both yard-arms topped alike. To *ride a-peak* is to ride with the yards peaked a-peak; and also when we ride with the hawse just over the anchor, then we ride a-peak, that is, when we ride ready to set sail. When they would express that they have rid a great road and stress, they say they *rid hawse full*, that is, that the water broke into the hawses. To *ride thwart* is to ride with her side to the tide; then she never strains her cables. To *ride betwixt wind and tide* is when the wind and tide have equal power: one, one way; the other, the other way, so that the ship lies rolling with her broadside in the trough of the sea; and thus she will roll mightily, but not strain her cables.

[**Riders** are great timbers (in hold, or else aloft) which are not properly belonging to the build of the ship, but only bolted on upon the other timbers to strengthen them where they find the ship to be weak. Merchantmen spare them as much as they can, because they hinder stowage of cask in hold.]

Rigging. The rigging of a ship are all ropes which belong either to masts or yards: and more particularly we say, the mast is rigged, the yards are rigged; that is, when they have all the ropes that belong to them. We say a ship is *well rigged* when the ropes belonging to her are of a fit size, not too big nor too little; also when there are no unnecessary ropes put up, as too many shrouds, tackles for the mast, crow-feet, or the like. When that we say a ship is *over rigged* it is meant the ropes are too big for her, which is a great wronging to the ship's sailing; for a little weight aloft doth hinder more than a great deal alow, by making the ship apter

to heel, and holding wind-taut; for note that the more upright any ship goes, the better she doth sail, for a crank-sided ship can never sail well by the wind. To tell the particulars of rigging a ship will require a small discourse by itself and would be too long for this, therefore I leave it to some other occasion.

Ring-bolts. Vide **Bolts.**

The **Risings** are those thick planks which go fore and aft on both sides, under the ends of the beams and timbers of the second deck, the third deck, the half, and quarter deck; whereon the beams and timbers of the deck do bear at both ends of the ship's sides: but those thick planks which in the like sort bear up the lower deck, are called clamps.

Rising Timbers are the hooks placed on the keel, which bear this name in respect that according to the rising by little and little of these hooks, so the rake and run of the ship doth rise by little and little from her flat floor.

A **Road** is any place where a ship may ride near the land, and yet cannot ride land-locked for all winds. A *good road* is where there is good ground for anchor hold, shoal water, and so as that howe'er the wind blow, there can no great sea-gate come in; being the land may be in the wind on one side, and some sands, rocks, or the like, to break off the sea on the other. Also we say, if it be a place (as in divers places of Barbary and others) where the sea will give a man warning (that is, the sea will come swelling in before the wind, as at Saffi[1]) of any foul weather, so that a man may have time to set sail and go to some other road, on the other side of the bay,

[1] 'Saphy,' 'Saphee': in Morocco.

headland, or the like, this we call shifting of roads. A *wild road* is a road where there is little land on any side, but lies all open to the sea; as to ride upon a headland, or alongst a shore where there is no bay, nor anything to break off the sea, or wind if it come off the sea. A bad road is the contrary to the good.

A **Roader.** We call any ship that rides at an anchor in the road, a roader.

Robbins are little lines reeved into the eyelet holes of the sail under the head-line,[1] and are to make fast the sail unto the yard; and the term is, *make fast the robbins*, and not tie them. And note that seafaring men use the word *make fast* instead of tieing, as land men use to say, tie a rope.

Roof-trees are those timbers which are made of light wood (as of masts sawn) that go from the half deck to the forecastle, and are to bear up the gratings and the ledges whereon the nettings lie. These are supported under with stanchions which rest upon the deck. Also if they have occasion to use any such piece over the half deck for nettings or sails, it is called a roof-tree.[2]

Ropes. Generally all the cordage belonging to a ship is called by the name of rope, as we say a cable is a good or bad rope (according as it is), and so a hawser or the like; but more particularly only some, which beside their particular appellation have the general word rope added to them. These are an *entering rope*, a *top rope*, a *boat rope*, a *buoy rope*, a *guest rope*, a *keel rope*, a *bucket rope*, a *rudder rope*, a *preventer rope* (which is a little rope seized cross over the ties close at the ram-head, that if one part of the

[1] **D, H, Z** read 'head-rope.' [2] See note on p. 178.

ties should break, the other should not run through the ram-head to endanger the yard), a *breast rope*, and is the rope which lashes the parrel to the mast.

Rope Yarns are the yarns of any ropes untwisted, but most commonly it is made of the ends of cables half worn or so. They serve for many uses to serve small ropes with, or to make sennit mats, or the like; also knittles, which is two twisted together, and caburns. They serve also to make up the yard-arms of the sails, and therefore still when we take in our sails the boys of the ship are to attend the sailors with these rope yarns, to furnish them as they have occasion to use them.

The **Round-house** is the uppermost room of the stern of the ship, and that which commonly is the master's cabin.

Round-in. This is a term used to the main and foresail when the wind larges upon them; then they let rise the main tack, or fore tack and haul aft the fore sheet to the cathead, and the main sheet to the cubbridge head. This they call *rounding aft*, or *rounding in* the sail; the sheets being there, they haul them down, to keep them steady from flying up, with a rope called a passarado.

Rouse-in is a word they use particularly whenas a cable or hawser doth lie slack in the water, and they would have it made taut; as when a ship rides but by one anchor, upon the turning of the tide the cable will be slack and so will be in danger to foul about the anchor, then to keep it stiff and taut they will haul in so much as lies slack, and this they call *rousing in* the cable, or *rouse in* the hawser; but it is not used in the hauling in of any other rope, as boat rope or the like.

Rove and Clinch. The Rove is that little iron plate unto which the clinch nails are clinched. The planks of clincher boats are thus fastened together, also the planks of the ports are fastened so together ; which kind of work is called rove and clinch.

The **Rowl** is that round piece of wood or iron wherein the whip doth go, and is made to turn about that it may carry over the whip from side to side with more ease.

The **Rudder** is that piece of timber which hangs at the sternpost of the ship, having four, or five, or six irons which are called pintles, according to the bigness of the ship, fastened to them, which pintles are fitted for the gudgeons at the sternpost, and so by these the rudder is hanged to the sternpost. This is the bridle which governs the ship. The narrower the rudder is, the better, if the ship do feel it ; for a broad rudder doth hold much dead-water, if the helm be put over to any side, but if the ship have a fat quarter so that the water cannot come quick and strong to the rudder, then she will require a broad rudder. The putting-to of the rudder is termed the *hanging the rudder.* The part or edge of the rudder which is next the sternpost is called the inside of the rudder ; the aftermost part is called the back[1] of the rudder.

The **Rudder-rope** is a rope or strap which is reeved into one hole of the rudder near the head, and so likewise through the sternpost, and then both ends are spliced together. This serves to save the rudder if it chance to be beaten off when the ship strikes aground.

Rudder-irons are the cheeks of that iron

[1] **D,** ' rake.'

whereof the pintle is part, and these are fastened and nailed round about the back[1] of the rudder.

To **Rummage** is to remove any goods or luggage out of a place betwixt the decks or any where else; but most commonly we use this word to the removing and clearing of things in the ship's hold, so that goods or victuals may be well stowed and placed. So when they would have this done they say they will go rummage the hold.

The **Run** is that part of the ship's hull under water which comes thinner and lanker away by degrees from the floor timbers all along to the stern-post. This is also called the ship's way aftward on; for as she hath either a good or bad run, so the water doth pass away swiftly or slowly alongst her, and the ship doth make more way. We say a ship hath a *good run* when it is long and comes off handsomely by degrees, and that her tuck do not lie too low, which will hinder the water from coming strongly and swiftly to the rudder; and a *bad run* whenas it is short and that the ship is too full below, so that the water comes slowly and weakly to the rudder, the force of it being broken off by the breadth of the ship alow, which will make (as it were) an eddy-water at the rudder; and that we call a dead-water. The run is of much[2] importance for the ship's sailing, for if the water come not swiftly to the rudder, she will never steer well; and it is a general observation that that ship which doth not steer well cannot sail well, and then she cannot keep a good wind, for if a ship have not fresh way through the sea she must needs fall to leeward with the sea; and therefore when

[1] **D, H, Z,** 'rake.'

[2] **D, H, Z,** 'main.'

ships will not steer well they lengthen them aftward on, or put to a false sternpost. Merchantmen do not give so much run as a man-of-war may do, because the narrowing in of the ship below doth lose much stowage.

Rung-heads are the heads or ends of the rungs, which are made a little compassing, and do lead or direct, as it were, the sweep and mould of the futtocks ; for in these rung-heads the lines which give the compass and bearing of the ship do begin. Also more generally the outward ends of the hooks, which are in the same manner compassing, are called rung-heads, for the sleeper which is bolted into the other rung-heads is also bolted into these, and they say it is bolted fore and aft to the rung-heads.

The **Rungs** are the ground timbers which do give the floor of the ship, and these are bolted to the keel ; being straight saving at the ends, where they begin to compass a little.

The **Runner** is a rope which is a part[1] that doth belong to the garnet and the two boat tackles, that before (which comes in the aftermost shrouds of the foremast) and that tackle abaft which comes in the foremost[2] shrouds of the mainmast. It is reeved in a single block which is seized to the end of a pendant, and hath at one end a hook to hitch into any thing, and at the other end a double block wherein is reeved the fall of the tackle, or the garnet ; which doth purchase more than the tackle or the garnet would do without it, and therefore to heavy things they use this, but for light ones they use only the tackle which hath a block with a hook which is seized to the standing part of the fall. *Overhaul the runner*, that is, to

[1] **D,** ' great part.' [2] ' Foremast.'

pull down that end which hath the hook in it, to hitch it into the slings or the like.

[**Running Ropes.** We call all those ropes in a ship which belong to the yards and sails, for the traversing of the yards or trimming the sails, running ropes; and are taken generally for all ropes that do not stand fast to the masts, without veering or hauling; as the shrouds, stays, and the like.]

S

Sails. To every yard in the ship there belongs a sail, and they are called after the name of those yards whereunto they belong. All head-sails (that is those that belong to the foremast and bolt-sprit [1]) do keep the ship from the wind and are used to flat the ship. All after sails, that is the mainmast and mizen sails, do keep her to the wind; and therefore few ships are so well conditioned as to steer quarter winds with one sail, but must have one after sail and another head sail, as it were, to countermand one another; yet some ships will steer with their main topsail only. At sea they call a ship *a sail*, as when they descry a ship, they say, a sail, a sail. The sails are cut in proportion as the masts and yards are in length and breadth one to another, excepting the mizen and spritsail. The mizen sail is cut by the leech, twice as deep as the mast is long from the deck to the hounds, and the spritsail is $\frac{3}{4}$ as deep as the foresail.

A **Scarf** is when the end of one timber is let into the end of another very close and even, or as they term it *wood and wood*, that is, so much wood taken away of the one as is of the other. In this

[1] **B,** 'bosprit.'

manner the stem is fastened to the keel, and that is called the *scarf of the keel* ; but yet when there is not a piece of timber long enough to make the keel then they make it of more, which are scarfed one into the other ; so when the stem or any other timber (which ought to be entire and all one) is too short it is pieced in this manner, and that they call *scarfing*.

A **Scuttle** is a square hole (so much as conveniently a man may go down at) cut through any hatch or any part of the deck to go down by into any room. Most commonly they are in these places : one close before the mainmast ; at the main halliards before the knight ; in the forecastle ; in the hatchway ; for the steward's room ; one in the gun room to go down into the stern sheets ; one in the master's cabin to go down into the Captain's cabin, if they be put from the fight aloft ; and so in any place where they desire to go through one deck down into another. Also, for vent for the ordnance, there are small scuttles with gratings. They have all covers fitted for them lest men in the night should fall into them. Also all the little windows and holes which are cut out aloft in the Captain's or Master's cabins, are called scuttles.

Scuppers, or **Scupper Holes,** are the holes close to all the decks through the ship's sides, whereat the water doth run forth of the ship from the decks ; and many ships have them made of lead.

Scupper Leathers are the round leathers which are nailed over the scupper holes that belong to the lower deck, which will keep out the sea water from coming in and yet give leave to any water to run out off the deck. These are also over the scuppers of the manger.

Scupper Nails are little short nails with broad heads, made of purpose to nail on the scupper leathers. With these also they nail on the coats of the masts and pumps.

A **Seel.** There is no difference betwixt seeling and heeling, but that heeling is a steady lying down of the ship on a side, either when she is aground, at an anchor, or under sail; and seeling is a sudden lying down, or tumbling to one side or the other, when the sea doth forsake her, that is, when the wave of the sea is past from under, faster than she can drive away [with it]; then when the ship lies down on a side after it, we say *she seels*. The *lee seel* is when she rolls to leeward. There is no great danger in this seel, though it be in a great storm, because the sea will presently come under and right her; but then when she rolls back to windward the danger is lest she should come over too short and suddenly, and so the wave break right into her and founder her, or carry away some of her upper works, as it hath fallen out with many ships. So that seeling is but a sudden heeling forced by the motion and force of the sea or wind.

To **Seize,** or **Seizing** is to make fast (or as you would say, to bind fast) any ropes together with some small rope yarn, marline, or any line. Also the fastening of a block at the end of a pendant, tackle, fall, garnet, or the like, it being bound-to with some small line, or the like, is called seizing. So if any rope be too long (as the shrouds are ever) and the end be bound up unto the same rope with anything, we call it seizing. So that in general the word *seizing* implies as much as binding anything together so as that they cannot slip out, as seizing the tacks into the clew and the like. The *boat's seizing* is a rope

made fast into a little chain or a ring in fore-ship of the boat, and is the rope which in harbours they make fast the boat by, to the ship's side.

Send. When a ship falls (whether under sail or at anchor) with her head or with her stern deep into the trough of the sea, we say she *sends* much, either astern or ahead. The reason of sending with her head is if she have a little bow, not sufficient to bear her up, and a fat quarter to pitch her forward. And so for her sending astern, it is contrary, when she hath too lank a quarter and too full or fat a bow.

Sennit is a line or a string made of rope yarn (commonly of 2, 6, or 9, which are divided in three parts and plaited one over another as they plait horses' manes) and so is beaten smooth and flat with a mallet. The use of it is to serve ropes.

To **Serve.** To serve any rope is to lay sennit, spun yarn, rope-yarn, a piece of canvas, or the like, upon a rope, and so roll it fast about to keep the rope from galling; as we serve the shrouds at the head of the mast, the boat rope, or any the like, which are in danger of fretting against any part of the ship, masts, or yards.

To **Set a Land, Sun,** or **Ship by the Compass.** That is to observe by compass how the land bears upon any point of the compass. This they use most commonly to do when they are going off to sea from any land, to mark how it did bear off them, that thereby they may keep the better account, and direct their course. Also they use to set the sun by the compass, that is to mark upon what point it is, to know thereby the hour of the day. So when two ships sail in sight (especially when a man-of-war chases a ship) they will set her by the compass, that is mark upon what point she bears; then if they stand both one

way (as commonly they do, if the chase strive to go away) by this we know whether we reach forth upon her, that is outsail her, or no. For if we bring her aft we do outsail her ; if we bring her forth she outsails us ; if we alter not, then we go both alike. As for example, the wind being at North, we stand both away West and the chase bears North-West (that will be on my weather bow), then if in sailing I bring her to bear North-West and by North, I have brought her a point aft ; and if I bring her North I have brought her just with my midship beam, and so I see I fetch upon her ; and it is called bringing aft because, whereas before she bore upon my loof, now she bears upon my quarter ; and so the contrary.

Settle a Deck. When we have occasion to lay a deck lower it is termed *settling* the deck ; as if her ordnance lie too high and we would have them lie nearer the water ; or that the decks be too close, and we desire rather to settle the lowermost than to raise the uppermost.

Sewing, or to **Sew.** When the water is gone from the ship so that she lies dry, we say the ship is *sewed* ; or if it be but gone from any part (as her head) we say the ship is *sewed ahead* ; if it be a place where the water doth not ebb so much that the ship may lie dry round, we say she cannot *sew* there.

Shackles are a kind of rings (but not round) made somewhat longwise, larger at one end than the other, in the middle of the ports on the inside. They are used to shut fast the ports with a billet, which they use to bar down the port with, and that is called the bar of the port. Also some of the same fashion, but small ones, are made fast to the corners of the hatches, to lift the hatches up by them.

The **Shank.** The longest part of the anchor is called the shank of the anchor.

Shank-painter is a short chain fastened under the foremast shrouds with a bolt to the ship's side, and at the other end hath a rope. Upon the chain doth rest the whole weight of the after part of the anchor when it lies by the ship's side, and the rope by which it is hauled up is made fast about a timber head. This is seldom or not at all used at sea, but in a harbour or a road.

Sheathing is, as it were, casing of a ship. It is done with thin boards, hair, and tar laid betwixt the ship's sides and those boards. This is done only under water or a very little above. The use whereof is to keep the worms from eating through the planks, as generally in all places to the southward they do. The thinner the boards, the better, for then the worm will presently [1] be at the tar (which he cannot abide) and so hath not means nor room to work in and out of the plank; and so will eat away more when it is thick than when it is thin.

Sheepshanks is a kind of knot which they cast upon a runner when it is too long, so that they cannot hoist in the goods over the ship's sides unless it be shortened; and by this knot they can quickly shorten it up as much as they list, and instantly undo it again.

Sheer Hooks are great hooks of iron (about the size of a small sickle, and more). They are set into the yard-arms of the main and fore-yards. The use whereof is that if a ship under sail come to board her that hath these hooks, she will cut her shrouds or tear her sails down with these

[1] Immediately.

hooks. Some do use them, but they are most unuseful and unnecessary things, and dangerous for the breaking of a yard if the hook should catch in the other ship's masts.

Sheering is when the ship goes in and out under sail, and he at the helm doth not steer her steady. Also where a tide-gate runs very swift, the ship will sheer in and out, and so much in some places that they are fain to have one stand at the helm and to steer her upon the tide for fear she should *sheer home* her anchors, that is draw them home: or if it be near the shore she may sheer aground.

Sheers. When two masts or yards (or if it be but poles), are set up on end a pretty distance off at the bottom, but seized across one another aloft near the top, we call them a *pair of sheers*. To this seizing is fastened a double block with a strap. They are placed, at the bottom, upon the chain-wales of the shrouds and there are lashed fast to the ship's sides, with tackles aloft which come down to the ship's sides to keep them steady aloft. The use of them is either to set in a mast or take out a mast, or if they have no mast, these serve to hoist in and out goods.

Sheets. The sheets are bent to the clews of all sails. In all sails that are low sails they serve to haul aft, or round aft, the clew of the sail; but in topsails they serve to haul home (that is, to haul close) the clew of the sail to the yard-arms. When they haul aft the sheet of the mainsail it is to make the ship keep by the wind; when they haul aft the sheet of the foresail it is to make her fall off from the wind (for the sheet doth trim the after leech of the sail by the wind).[1] When the

[1] These words are not in **D** or **H.**

ship will not fall off from the wind, they flat in the fore sheet, that is, pull the sail flat in by the sheet, as near into the ship's sides as may be. They *ease the sheet* of the sail, that is to veer out or let go a little of it. *Let fly the sheet*, that is, let it run out as far as it will and then the sail will hold no wind, but lie fluttering loose; and then if it be an extraordinary stress of wind it will split the sail to pieces. But this we do both with topsail sheets and the other sheets when we suspect the wind will be so great that it will carry our masts by the board, or overset the ship. Also in great stiff gales we use to bind another rope to the clew of the sail above the sheet block, to succour and ease the sheet lest it should break, and that rope we call a *false sheet*, and this is only used to the main and foresails. Those planks under water which come along the run of the ship and are closed to the stern-post are called *sheets*, and that part within board abaft, in the run of the ship is called the *stern-sheets*.

Shivers.[1] There are two sorts of shivers used, either of brass or wood. The brass shivers are now little used but in the heels of the topmasts. The wooden shivers are either of one whole piece, and these they use for all small pulleys and small blocks; but in the knights and winding-tackle blocks they use shivers which are made of quarters of wood let in to each other, for these will hold when the whole shivers will split, and are called quarter shivers.

Shoal. Shoal and shallow are all one. When they say there is very good *shoaling*, it is meant that the water doth grow shallower by degrees and not suddenly; nor sometimes deep, and some-

[1] Sheevers.

times suddenly a shoal, or bank. It is very safe and commodious going in with a shore where there is good shoaling, for by that we have some certainty whereabouts we are and how far distant from the land, if the shoaling be first known; and commonly where there is good shoaling the coast is not dangerous.

The **Shore** is counted [1] the land near the sea, or the banks of the sea. The *lee shore* is that whereon the wind blows. Seamen avoid these by all means, for it is dangerous if it overblow. The *weather shore* is that from whence the wind comes.

Shores are any pieces of timber or anything else that is fit to bear up another from sinking or falling, as when a ship is in danger of overthrowing aground we lash fast masts or yards to their sides, they bearing on the ground; and these we call shores, shoring her up. Also some timbers that are set to bear up a deck, when it is weak or overcharged with weight, are called shores.

Shot. There are many kinds of shot. That which flies farthest and pierces most is *round shot*; the next is *cross bar*, which is good for ropes and sails and masts; the other *langrel*, which will not fly so far but is very good for the rigging, and the like, and for men; so is *chain shot* and *case shot*, or *burr* [2] *shot*, which is good to ply amongst men which stand naked, plying of their small shot.

Shot of Cable. Two cables spliced together make a shot, and the use of them is great in deep waters and great roads; for a ship doth ride much easier by one shot than by three short cables ahead. Vide *Ride*.

Shrouds. The shrouds are those ropes which come from either side of all the masts, the mizen,

[1] **B, H,** 'called.' [2] **D, H,** 'burrell.'

mainmast and foremast shrouds have at the lower ends dead-men-eyes seized into them [and are set up taut by lanniers to the chains, which have also dead-men-eyes in them]. At the other end they are fastened over the head of the mast, the pendants, foretackle, and swifters being first put on under them. At this uppermost part they are served, for galling against the mast. The top-mast shrouds are in the same manner fastened with dead-men-eyes and lanniers to the puttocks, or the plates of iron which belong to them, and aloft over the head of the mast at the other, *Ease the shrouds* ; *slack the shrouds* ; that is when they are too stiff set up. *Set taut the shrouds* ; *set up the shrouds,* that is, make them stiffer. Some ships desire to have the shrouds taut, some slack. The lanniers are to set up the shrouds. Vide *Lanniers.* The boltsprit hath no shrouds.

The **Skeg** is that little part of the keel which is cut slanting and is left a little without the stern-post. The reason and use whereof is only intended to be that it should save the rudder from beating off if the ship should chance to beat aground : but these skegs are very unuseful and inconvenient ; for, first, they are apt to snap off and so endanger the sternpost ; next, in a harbour or river where ride many ships, they are apt to catch another ship's cables betwixt that and the rudder ; and lastly, when the ship is under sail they hold much dead-water betwixt them and the rudder. Therefore it is better to have no skeg, but to hang the rudder down close to the stern-post, with the bottom even to the bottom of the keel, only pared away a little sloping towards the aftermost side of it.

The **Skiff,** vide **Boat.**

A **Slatch.** When any part of a cable or rope

(that is meant of the middle, not of the end) doth hang slack without the ship (as the cable when it is slack in the water, or the lee-tack, sheets, braces, or the like, do hang in the water, or loose by the ship's side), then they say *haul up the slatch* of the rope or cable. Also when it hath been a set of foul weather, and that there comes an interim or small time of fair weather to serve their turns, they call it a little slatch of fair weather, or the contrary.

Sleepers are those timbers which lie fore and aft the bottom of the ship on either side the keelson, just as the rung-heads do go. The lowermost of these is bolted to the rung-heads, and the uppermost to the futtocks, and so these between them do strengthen and bind fast the futtocks and the rungs, which are let down one by another and have no other binding but these sleepers. These do line out (as it were) and describe the narrowing of the ship's floor.

To **Sling** is to fasten any cask, ordnance, yard, or the like in a pair of slings.

Slings. There are first slings to sling casks in (when we hoist it in, or any the like) which are made of rope spliced at either end into itself, making an eye at either end so large as they think fit to receive into it the cask ; and then the middle part of the rope also they seize together, and so make another eye for to hitch in the hook of the tackle or garnet. Another sort are made long with a small eye at either end, to put the one over the breach of the piece, the other to come over the end of a crow of iron which is put into the mouth of the piece, and so by these they hoist it in. A third sort is any rope or chain wherewith we bind fast the yards aloft to the cross-trees and the head of the mast, to the end

that if the ties should break the yard may not come down. These are called slings, which are chiefly used when we come to fight, for fear of cutting the ties.

A **Smiting Line** is a small rope which is made fast to the mizen-yard-arm below, next the deck; and when the mizen-sail is farthelled up this is made up alongst with it to the upper end of the yard (the sail being made up with rope yarns), and so comes down to the poop. The use whereof is to loose the mizen-sail without striking down the yard; for they pull this rope and that breaks all the rope yarns, and so the sail comes down. This line is called a smiting line, so they *smite the mizen*, that is, pull that rope that the sail may come down.

A **Snatch Block** is a great block with a shiver in it and a notch cut through one of the cheeks of it, by which notch they reeve any rope into it; and this is for quickness to reeve the rope in, for by this notch one may reeve the middle part of a rope into the block without passing it in by the end, which would be longer a-doing. It is made fast commonly with a strap about the main-mast, close to the upper deck, and is chiefly used for the fall of the winding tackle, which is reeved in that block, and so brought to the capstan.

Sockets. The holes into which the pintles of the murderers, fowlers, or the like, do go, are called sockets. Also some call the gudgeons, wherein the pintles of the rudder do hang, by the name of sockets.

A **Sound.** Any great in-draught of the sea betwixt two headlands, where there is no passage through, may be called a Sound (as Plymouth Sound, &c.), but when they name *The Sound*, it is meant of that of the East countries, being the

most famous and greatest sea that is known by the name of a sound.

To **Sound** is to try with a line, a pole, or anything else, the depth of the water. Also when we would know what water is in the well of the pump we put down a small line with a weight to it, and that is called *sounding the pump*. Vide *Deep Sea Line* if you would know more of sounding: instead of bidding one sound, they say *heave the lead*.

Sounding-Lead is as the deep-sea-lead, only it is commonly but seven pound weight, and about 12 inches long.

Sounding-Line. The difference betwixt the sounding-line and deep-sea-line are these: the sounding-line is bigger[1] than the deep-sea-line; a sounding-line is commonly cut to twenty fathom, or little more; the other will be a hundred or two hundred fathom. The one is used in shoal, the other in deep water. The deep-sea-line is first marked at twenty fathom, and so to thirty, forty, &c.; but the sounding-line is thus marked: at two fathom next to the lead it is marked with a piece of black leather put into it betwixt the strands; and at three fathom the like; at five, a piece of white woollen cloth; at seven fathom a piece of red cloth; at ten a piece of leather, at fifteen fathom, either a white cloth or a piece of leather; and so it is marked no farther. This may be used when the ship is under sail, but the deep-sea-line cannot with any certainty.

A **Spell** is, as you would say, the doing any labour for a short time, and so ceasing for others to take their turns; as when they pump a hundred

[1] *I.e.* thicker.

strokes, or a glass, they call it a spell. A *fresh spell;* that is, others come to work, as rowing in the boat. When one says to another he will *give him a spell;* that is, row or pump in his place; and this word is commonly used only to pumping and rowing.

To **Spend.** When a mast or yard is broken by foul weather, or any the like occasion, they say they have *spent* their masts or yards; but if it come by fight, or so, they do not use the word spent, but *shot by the board,* or *carried away by the board* with a shot, or with another ship's masts or yards that may be bigger and stronger.

Spikes[1] are (as it were) great, long iron nails with flat heads, and are of divers lengths, a foot or two long. Some of them are ragged spikes that they may not draw out again. They are used in many places for fastening of timbers and planks. In foul weather they use to *spike up* the ordnance; that is, nail down a quoin, and the like, to the deck close to the breech of the carriage, to help to keep the ordnance strong up to the ship's side, lest they should break loose when the ship rolls. And for their further ease they use to take off the after trucks.

To **Spill.** When a sail has much wind in it and that for any occasion (either to take in, or for fear of wronging the masts) we let the wind out of it, so as that it may have no force in it, we say *spill the sail,* which is done by letting go the sheets and bowlines, and bracing the weather brace in the wind; then the sail will lie all loose in the wind. But this word is most commonly used to the mizen-sail when they

[1] 'Speekes.'

take in the mizen, or peak it up, they say *spill the mizen.*

A **Spindle** is the smallest part of the capstan, which is betwixt the two decks. To the spindle of the jeer capstan are whelps to heave the viol.

To **Splice** is to make fast the ends of ropes, one into the other, by opening the strands at the ends of both the ropes, and then with a fid laying every strand orderly one into another. Also when we would make an eye at the end of a rope, we take the end of the rope and undo the strands, and so opening the strands where we would have the splice, with a fid, we draw in the ends of the strands, and so weaving of them orderly make the splice; and so seize the end down with some sennit or the like. There are these sorts of splices: the *round splice,* that is the splicing of the ends of two ropes one into another, as I described; the *cunt splice,* that is when the ends of either rope are spliced into the other rope some distance from the end, and not one end in another (as the first), then they will make a long slit (as it were) betwixt them, which is the reason of the name.

Split. When the wind hath blown a sail to pieces, we say the sail is split. Also when shivers break, we say they split. If a shot come and break a carriage of a piece, we say, it hath split the carriage.

Sponge. The sponge of a piece of ordnance is that which makes it clean. They are commonly sheep-skins put at the end of a staff, which is made somewhat bigger there according to the bore of the piece, so as the sponge may go in full and close but not too strait; but we have it also fitted to the ends of a stiff rope,

so is the rammer also, to sponge and lade within board. We ever sponge a piece of ordnance before we put in powder. In fight when the ordnance is plied fast, to keep it from heating we wet the sponges; urine is the best, but else with vinegar, water, or what we have.

To **Spoon** is to put a ship right before the wind and the sea without any sail, and that is called *spooning afore.* This is done most commonly when in a great storm a ship is so weak with age or labouring that we dare not lay her under the sea, for though a ship when she spoons afore do roll more, yet she strains not so much; but if she be a dangerous rolling ship, then perforce she must be laid under the sea, for else she will roll her mast by the board, and also it is dangerous, for if a sea should overtake her, when she hath a desperate seel, it may chance to break in and founder her. Sometimes then to make her go the steadier they set the foresail, which is also called *spooning with the foresail.* When they do this they are sure of sea room enough.

The **Spring,** or **Spring-tide.** When after the dead neaps the tides begin to lift and grow higher, we say it is spring. Near upon three days before the full and change of the moon, the spring begins; and the top or highest of the spring is three days after, then the water doth high most with the flood and low most with the ebb; which is the reason that at these times we launch and grave all of our great ships. The tides also run much stronger and swifter, than in the neaps.

To **Spring.** When a mast is but cracked in any place (as at the hounds, partners, or elsewhere), we say it is *sprung,* as *they sprung their*

masts with bearing a sail, &c. To *spring one's loof,* vide **Loof.**

Spritsail, vide **Sail.**

Spritsail-topmast, vide **Topmast.**

Spritsail-topsail, vide **Sail.**

Spritsail-yard, vide **Yard.**

Spun-yarn is rope-yarn, the end scraped thin, and so spun one to the end of another with a winch,[1] and make it as long as they list. This serves to serve some ropes with, but most commonly it is made to make caburn of.

Spurkets are the holes or spaces betwixt the futtocks or betwixt the rungs by the ship's sides, fore and aft, above and below. To the spurkets below in hold (which are below the sleepers) there are boards fitted, which they take up to clear the spurkets if any ballast go in betwixt the timbers; but for those aloft there is no use, only it were good they were in all ships fitted up with light wood, or old junks, to keep the ship's sides, aloft, musket-free.[2]

Standing parts of running ropes. The standing parts are those parts of running ropes (or rather that end of a running rope) which is made fast to any part of the ship; to distinguish it from the other part whereon we use to haul: (as the standing part of the sheet, is that part which is made fast by a clinch into a ring at the ship's quarter, and the like) for when we say *haul the sheet,* that is meant by the running part; but if they say *overhaul the sheet,* then they haul upon the standing part. The same is of all tackles and running ropes.

Standing ropes are counted all those ropes

[1] **D, H** read 'wrentch.'

[2] *I.e.* proof against musket bullets.

(as the shrouds, stays, and backstays) which are not used to be removed or to run in any block, but are only set taut or slacker as they have occasion.

To **Stay,** or, **Bring a Ship a-stay.** When we tack the ship, before the ship can be ready to be tacked she must come *a-stays* or *a-backstays* ; that is, when the wind comes in at the bow which was the lee bow before, and so drives all the sails backward against the shrouds and masts, so that the ship hath no way but drives with the broad side. The manner of doing it is at one time and together to bear up[1] the helm, let fly the sheet of the foresail, and let go the fore bowline, and brace the weather brace of the foresail ; the same to the topsail and topgallant-sail, only they keep fast their sheets. If the spritsails be out, then they let go the spritsail sheet with the fore sheet and brace the weather brace ; (the tacks, sheets, braces, bowlines of the mainsail, main topsail and mizen standing fast as they did). To be *taken a-stays,* that is when the wind comes contrary on the sudden (which happens most upon headlands or calm weather) and so brings the ship a-stays. Sometimes by the negligence of him at the helm, sometimes if it be little wind and a head sea on the weather bow, a ship may *miss staying ;* that is to fall back and fill again. The best conditioned ships are those which stay with least sails, as with two topsails, or fore-topsail and mizen, but no ship will stay with less sail than those, [and few with so little].

Stays, and **Backstays.** All the masts and

[1] *Sic* in the MSS., but evidently the helm should be put down.

topmasts and flag staves have stays (excepting the spritsail-topmast). The mainmast stay is made fast by a lannier to a collar which comes about the knee of the head. The main-topmast stay is made fast into the head of the foremast by a strap and a dead-man-eye there ; the main-topgallant mast is in like manner to the head of the fore-topmast. The foremast, and masts belonging to it, are in the same manner stayed at the boltsprit, and spritsail-topmast, and these stays do likewise help to stay the boltsprit. The mizen stay comes to the mainmast by the half deck, and the topmast stays come to the shrouds with crow feet. The use of these stays is to keep the masts from falling aftward towards the poop. There is much difference in staying of masts, in respect of a ship's sailing or working. Generally, the more aft the masts hang, the more a ship will keep in the wind ; and the forwarder, the less. The Flemings stay their masts much aft, because else their ships, being long floaty ships, would never keep a wind ; but short and deep ships rather covet upright masts. There are many differences of conditions in ships for their sailing according as they are stayed, for some will have the stay taut, some slack. The backstays of all masts which have them (those are only the mainmast and foremast, and the masts belonging to them), go down to either side of the ship, and are to keep the mast from pitching forward on overboard.

To **Steer** is to govern the ship with the helm. He steers best that keeps the ship evenest, from yawing in and out, and also that uses least motion in putting the helm too far over. There are three kinds of directions to steer by : the one is by the land, that is to steer by any mark on

the land, and so to keep the ship even by that; this is easy. The next is by the compass, that is to keep the ship upon a point of the compass; this is harder [because the ship's head will come before the compass[1]]: and the third is to steer as they are directed and conded; and this is easiest of all. If you would know the terms belonging to steering, *vide* **Cond.**

The **Steerage** is the place where they steer; out of which they may see the leech of the sails, to see if they be in the wind or not.

The **Stem.** The stem of the ship is that great timber which comes compassing from the keel (wherein it is scarfed) up before the forecastle; this, it may be, is not all of one timber (as in great ships it cannot), and this doth give[2] the rake of the ship. When two ships stand *stem for stem*, they come right with their heads one against another. To *give a ship the stem*; that is to run right upon her with the stem. To *go stemming aboard* a ship; that is the same as giving the ship the stem.

A **Step.** They call that piece of timber which is made fast to the keelson, wherein the mainmast doth stand, a step. Also those places and timber wherein the mizen-mast, foremast, and the capstans do stand, are called steps.

The **Stern.** All the aftermost part of the ship is called the stern by a general appellation; but most exactly considered only the very outwardmost part abaft is the stern, for the quarter is counted to be from the steerage to the transom and fashion piece of the stern.

Stern Sheets, vide **Sheet.**

[1] *I.e.* the compass needle will lag behind the movement of the ship's head.

[2] **D, H** read 'guide.'

To **Steve, or Steving.** We say the boltsprit or beakhead *steves* when it stands too upright and not straight forward enough. Also the merchants call the stowing of their cottons (which they force in with screws so much that the decks will rise 6 or 8 inches), *steving* of cottons.

Steward's Room. That is that part of the hold where the victuals are stowed.

A **Stirrup.**[1] When a ship by any mischance hath lost a piece of her keel and that we cannot come well to mend it, but (as it were) patch a new piece unto it, they bind it with an iron which comes under the keel, and so upon either side the ship, where it is nailed very strong with spikes to strengthen it. This piece so put to the keel we call a stirrup.

Stoaked. When the water cannot come to the well, then we say the *ship is stoaked*, and that is when the limber holes have some ballast or anything else got into them so as that the water cannot pass, we say the *limbers are stoaked*. Also when anything is gotten in or about the bottom of the pump so that it cannot draw water, we say the *pump is stoaked*. Corn and the like is very bad for this.

Stop. When they come to an anchor and have let run out as sufficient quantity of cable as will make the ship ride, or that the ship be in a current where it is best to stop her a little by degrees, then they say *stop the ship* ; and so hold fast the cable, and then veer out a little more, and so stop her fully, to let her ride. For stopping leaks, *vide* **Leaks.**

A **Stopper** is a piece of a rope having a wale-knot at one end and a lannier spliced to it, and

[1] 'Sturrop.'

the other end is made fast to some part ; as the stoppers for the cables, to the bottom of the bitts, by the deck ; the stoppers for the main halliards, to the knight. The use of them is chiefly for the cables, to stop the cables when we come to an anchor, that it may go out by little and little. The manner is but binding this wale-knot about the cable with the lannier, and it will instantly catch hold in it so that it cannot slip away, as the nippers do which hold off the cable. The term is *laying on the stoppers and casting off the stoppers.* Also we use them to the halliards when the yard is hoisted aloft, to stop it till the halliards be belayed. A ship rides by the stoppers when the cable is not bitted, but only held fast by them, but this is not safe riding in a stress.

To **Stow** is to put any goods in hold in order ; for else we say it is not *stowed,* but *laid in hold.* Also we call it *stowing* between the decks, if any goods or victuals be placed in order upon the decks ; but it is not used in this kind to small things, as to a chest or the like. Also the placing and laying of the topsails in the top is called *stowing the topsails.*

A **Strake** is the term for a seam betwixt two planks ; as the garboard strake, or the ship heels a strake, that is one seam. Some ships are built with a standing strake or two, that is when there is the whole breadth of a plank or two rising from the keel before they come to the floor timbers. These ships are naught to lie with the ground, for wringing their keels, but this doth make them keep an excellent wind : this build is most used amongst the Flemings.

A **Strap.** A rope which is spliced about any block, that the block thereby be made fast to

any place where they have occasion to use it, by the eye which is made in the strap at the arse of the block.

Stream Anchor is a small anchor which we use to the stream cable.

Stream Cable is a small cable which we ride withal in streams, as rivers, or in fair weather when we stop a tide. For ever we use the smallest ground tackle that we have if it will serve, both for lightness to weigh and to save the best from wetting.

A Stretch. They use this word, not as it is commonly, to strain a rope, but thus: when they go to hoist a yard, or haul the sheet, they say *stretch forward* the halliard, or the sheet; that is, deliver along that part which they must haul by into the men's hands, that they may be ready to hoist or haul.

To **Strike** is to pull down the sails. When one ship strikes to another it is a sign of respect, unless it be for occasion of staying for one. If a man-of-war come up with a merchant, or any other, if he strike it is intended that he yields himself. Also when a ship beats upon the ground, they say she *strikes*. So when we take down the topmasts, they say *strike them down*. So when we lower anything into the hold with the tackles or any other rope, we call it *striking down* into hold.

Studding Sails. *Vide* **Boom.**

Suck. When all the water is pumped out, and that the pump doth draw wind, we say *she sucks*. Also when a ship doth draw down the helm and doth, as it were, suck the whip staff out of his hand at the helm. A ship gripes when she doth thus; the reason may be either much foulness, the staying of her masts too much aft, or that she may be out of her trim.

Surge. We call a wave a surge, but it is used in this sense: when they heave at the capstan and the cable slips back again, they say the *cable surges*, to prevent which *vide* Nippers.

Swifters do belong to the main and foremast, and are to succour the shrouds and keep stiff the mast. They have pendants, which are made fast under the shrouds at the head of the mast with a double block, through which is reeved the swifter, which at the standing part hath a single block with a hook, which is hitched in a ring by the chain-wales, and so, the fall being hauled, doth help to strengthen the mast; and this fall is belayed about the timber heads of the lower rails aloft.

Swifting. When we bring ships aground or careen them we use to *swift* the masts, to ease them and strengthen them, which is done in this manner: they lash fast all the pendants of the swifters and tackles with a rope close to the mast as near their blocks as they can; then they carry forward the tackles, and so bowse them down as hard and taut as they can; and this eases the mast, so that all the weight of the mast doth not hang by the head, as otherwise it would, and also doth help to keep it from rising out of the steps.

T

Tacks. Tacks are great ropes, having a wale-knot at one end which is seized into the clew of the sail, and so reeved first through the chess-tree and then comes in at a hole of the ship's side. The use of this is to carry forward the clew of the sail and to make it stand close by a wind, and then the sails are thus trimmed: the main tack, foresail and mizen tacks are close aboard

or hauled as forward on as may be, so are the bowlines of the weather side; the lee sheets are hauled close aft, but the lee sheet of the foresail not so much, unless the ship gripe; the lee braces of all the yards are braced aft, and the topsails are governed as the sails whereunto they belong. And hence they say a ship stands or sails *close upon a tack*, that is close by a wind. *Haul aboard the tack*; that is to have it down close to the chess-trees. *Ease the tack*; that is not so close aboard. *Let rise the tack*; that is let it go all out. It is commonly belayed to the bitts, or else there is a kevell which belongs to them. These tacks do only belong to the main-sail, foresail, and mizen, and they are ever made tapering.

To **Tack a Ship.** To tack the ship is to bring her head about to lie the other way, as if her head lay first west-north-west now it must lie east-north-east, the wind being at north. Then supposing the ship hath all her sails out which we use by a wind, thus they do: first they make her stay (for which, *vide* to stay); when she is stayed then they say she is *payed*, and so *let rise and haul*, that is, let the lee tack rise and haul aft the sheets; and so trim all the sails by a wind as they were before, that is, cast off that bowline which was the weather bowline and now set up taut the other, and so all sheets, braces, and tacks, as a ship that is trimmed by a wind must have.

Tackles are small ropes which run in three parts, having either a pendant with a hook to it or a runner, and at the other end a block and hook to catch hold and heave in goods into the ship. There are these many sorts used: that is, the *boat's tackles*, which stand one on the main-

mast shrouds, the other on the foremast shrouds to hoist in the boat, and do serve also for other uses; the *tackles* which belong to the mast, which serve in the nature of shrouds to keep the mast from straining; the *gunner's tackles*, with which they haul in and out the ordnance, and, lastly a *winding tackle* (which *vide*). The rope of a tackle is called the *fall* (that part which we haul upon) but that end whereunto the block is seized is called the *standing part*. To haul upon a tackle is termed to *bowse upon* the tackle.

Tally is a word they use when they haul aft the sheets of the main or foresail; they say, *tally aft the sheets*.

Tampkin is a small piece of wood turned fit for the mouth of any piece, which is put in there to keep out the rain or sea water from washing in when the pieces lie without board.

Taper Bore is when a piece's bore is wider at the mouth than towards the breech. Some are of opinion that these pieces do not recoil so much; but they are not so good, for sometimes if the shot be too high[1] it may be it will not come home to the powder, which is dangerous for the piece.

Tapering is when any rope or anything else is made bigger at one end than at the other; as the tacks are made tapering, which makes them purchase the better, and saves a great deal of stuff because the rope at one end bears little or no stress. I have seen in Flemings the top-sail sheets tapering.

Tarpawling is a piece of canvas that is all tarred over, to lay upon a deck or grating to keep the rain from soaking through.

Taunt is when a mast is very high for the

[1] *I.e.* too large in diameter.

proportion of the ship ; we say it is a taunt mast. The Flemings have them so for the most part ; for taunt masts and narrow yards are best to sail by a wind, for the sails stand so much the sharper, but yet they do wring a ship's side more than a short mast and a broad yard, which is the reason that our ships use short masts and broad yards.

Taut.[1] That is to set a rope stiff and fast; as we say, *set taut* the shrouds, the stay, or any other rope, when it is too slack.

A **Tempest.** When it overblows so exceedingly that it is not possible to bear any sail, and that it is a wind mixed with rain or hail, they call it a tempest, which they count a degree above a storm.

The **Thaughts**[2] are the seats whereon those that row in the boat do sit.

Thight.[3] When a ship is staunch and makes but little water she is thight, which is quickly known by the smell of the water, for if the water stink much it is a sign it hath laid long in the ship, and if it be sweet it is a sign it comes in newly.

Thowles are the small pins which they bear against with their oars when they row, and stand in holes upon the upper side of the gunwale of the boat. They are commonly made of ash for toughness.

Thwart-ships. That is anything that is done or lies across the ship from one side to the other ; we say it lies *thwart-ships*, and the contrary is *longst-ships*, that is, along the ship.

Tides. This word tide is common both to

[1] 'Tawght.'

[2] According to the N.E.D., the word 'thwart' was not introduced until about 1736.

[3] Tight. The older word is now obsolete, except in dialect.

the ebb and flood, for it is called *tide of ebb* as well as *tide of flood.* A *windward tide* is when the tide runs against the sea and wind ; then the sea breaks most and goes highest, but a ship at anchor strains her cables least. *A leeward tide* ; that is when the tide and wind go both one way, then the sea is smoother. A *tide-gate,* that is, where the tide runs strong. To *tide it over* or *up to* a place ; that is to go with the tide of flood or ebb, and so stop the contrary tide at an anchor till the same tide come again ; and this is used when the wind is contrary but doth not overblow, for then they cannot stop at an anchor, and if they keep under sail they will lose more in one leeward tide than they shall get in two windward tides. When they say it flows *tide and half tide* in any place the meaning of it is thus : (for the speech is most unproper to common understanding, implying as much as if it did flow a tide and a half in some places together, and but half an ebb), that the tide doth run three hours (which is four points) longer in the offing than it doth by the shore. By *longer* is not meant more hours (for it doth ever ebb and flow six hours) but thus : if it be high water at the shore at twelve o'clock, it shall not be high water in the offing till it be three o'clock (which is the compass and time for the running of half a tide) ; so, according as it ebbs or flows more, they say it runs tide, half, and half quarter (that is, five points). When they come into a harbour or over a sand they say they will *bring their tide* with them ; that is to come with the flood which may carry them over. Note that where it flows tide and half tide, that though the tide of flood run aloft, yet the tide of ebb runs underfoot, that is close by the ground. And so for the tide of ebb it will flow underfoot.

Tier.[1] When a deck hath ordnance fore and aft (though there want some) we call that a tier of ordnance. Some ships have two tier, or three. The forecastle and the half deck being furnished make half a tier. The *cable tier*; that is the row[2] which is in the middle of the cable when it is coiled up.

Ties are four-strand ropes, hawser-laid, which is in respect that this kind of laying doth not stretch so much as three-strand ropes, and besides run smoother in the hounds. These are the ropes by which the yards do hang, and do carry up the yards when the halliards are strained to hoist the yards. The main-yard and fore-yard ties are first reeved through the ram-heads, then through the hounds at the head of the mast, and so, with a turn in the eyes of the slings which are made fast to the yard, they are seized fast and close to the yard. The mizen-yard and topmast-yard have but single ties, that is one do run in one part. The spritsail-yard hath none, for it is made fast with a pair of slings to the boltsprit.

Tiller. The helm and the tiller is all one (therefore *vide* Helm), only the word tiller is more properly used for that which we steer the boat by; as they say give me the tiller of the boat, not the helm, yet it is all one in use.

Top-armours are the cloths which are tied about the top of the masts for show, and also for to hide men in fight which lie there to fling firepots, use small shot, or the like.

Topgallants are the masts above the topmasts. These sails do draw very much, quarter winds, in a loom or fresh gale, so it blow not too much.

[1] 'Tire.'

[2] **B** reads 'room.' The term 'cable tier' now means the space in the ship in which the cables are placed.

Topmast. The topmasts are ever half so long as the masts unto which they belong; but there is no one absolute proportion in these and the like things, for if a man will have his mast short, he may the bolder make his topmast long.

Top Ropes are those ropes wherewith we set or strike the topmasts. They belong only to the main and fore-topmast. This rope is reeved through a great block which is seized under the cap on one side, and then it is reeved through the heel of the topmast, where is a brass shiver which is placed thwartships, and then is brought up and made fast on the other side of the cap with a clinch to a ring which is fastened into the cap. The other part comes down by the ties, and so is reeved into the knight, and brought to the capstan when they heave it.

To **Tow** is to drag anything astern the ship in the water; as to tow the boat or to tow a small ship, or the like, with a hawser out astern. The nearer anything is to the boat, or the like, when it is towed, the less it doth hinder the ship's way; but the farther off, the easier it is for that which is towed, for then the ship will not give it such twitches.

Transom. That timber which lies athwart the stern of the ship betwixt the two fashion pieces, and doth lay out her breadth at the buttock, is called the transom. This is just under the gun-room port astern. To *lie with a ship's transom*; that is to lie just with the end of the planks where they are fastened to the fashion pieces astern. To *come in a ship's transom*; that is, just betwixt her gun-room port and her quarter port: this is the safest coming up [in fight, or assaulting of a ship], for there ships are most naked, and there galleys do use to come up; but

now they begin to cut out ports close by the transom.

Traverse. We call the way of the ship (in respect of the points whereon we sail, and the angles which the ship makes in going to and again) the traverse of the ship; as we say, a man doth traverse his ground when he goes in and out. We use to note how many hours the ship hath gone upon a point, what sails she hath forth, how near a wind, and so judge what way she makes. This we set down upon a paper besides the plot which we call a traverse, and then drawing a line from the place where we last were to that place where the last prick or mark is, we see in the whole what course, and how far, we are gone. This we call a *dead reckoning*; then if we can observe and find the observation, and this meet, we are sure we are right, otherwise we trust more to the observation and reform our reckoning by that. Also the laying and removing a piece of ordnance till it come to lie with the mark is called the *traversing of the piece.*

Traverse Board is a board which they keep in the steerage, having the thirty-two points of the compass marked in it with little holes on every point, like a noddy[1] board. That is for him at the helm to keep (as it were) a score, how many glasses they have gone upon[2] of the compass, and so stick a pin on that point. This is to save the Master a labour, who cannot with so much curiosity watch every wind and course so exactly as he at helm, especially when we go by a wind and the wind veers and hauls.

[1] Noddy was a card-game, apparently an early form of cribbage.

[2] The words 'any point,' seem omitted here; but they do not appear in any of the MSS.

Trenails (*quasi* nails made of a tree)[1] are the long wooden pins made of the heart of oak, wherewith they fasten all the planks unto the timbers; for though we bolt the buttheads for the better assurance and strength, yet the trenails are they which do most fasten the planks, for we do use as little iron under water as we may conveniently, lest the ship should grow iron sick. These trenails must be well seasoned and not sappy, for then the ship will be continually leaky, and it will be hard to find. If a ship by any beating upon the ground do make a trenail give back and come a little out again, they term it *starting of a trenail.*

Trestle-trees are joined to the cross-trees, and do lie across each other and serve to the same use. They differ only that the trestle-trees are those which go longships, the other thwart-ships. *Vide* Cross-trees.

To **Trice** is to haul up anything with a dead rope; that is when we haul by a rope that doth not run in any block, or haul up by any device but by hand, as if an empty cask be made fast to a rope that is no tackle they say, *trice it up*; or any chest, or like goods, which is fastened to a rope and so hauled up by hand into the ship. We call it *hauling by hand,* when we have not the help of any capstan, tackle, or the like which might purchase easier, but only do it by the immediate and only force of hands.

The **Trim.** Though commonly by the trim of a ship is understood the swimming of her, either ahead or astern or on an even keel, in whether of these the ship goes best, that they

[1] **D** reads, 'Trenells, *quasi* tree-nails, being made of a tree.'

call her trim ; but that is not only to be counted her trim, for some ships will go well or ill according to the staying of the masts, the slackness of the shrouds, or the like. Therefore, in my mind, the order of her swimming considered with this fitting of her masts and ropes wherein the ship sails best should be counted her trim, and not only the line of her swimming in water. The ways of finding a ship's trim must be in sailing with another ship, to bring her ahead so many glasses ; then astern as many ; then on even keel. That way which she goes best is her trim, in respect of her mould under water. Then, to make her go better, ease the stays or set them up ; also the shrouds. Then wedge the mast, or give it leave to play ; and so in time it is easy (with a little diligence) to find the trim of a ship. Next to Men-of-War (whose daily practice it is) the Scotchmen are the best in the world to find out the trim of a ship, for they will never be quiet, but try her all ways, and if there be any goodness in her they will make her go.

The **Trough of the Sea.** That is in the hollow betwixt two waves. When we lay a ship under the sea (that is, when we lay her broadside to the sea) we say she lies in the trough of the sea.

Trucks are those little wooden wheels (being made without any spokes) that the carriage of the ordnance do run on. Also those little round things of wood which belong to the parrells are called trucks.

Trunnions are those knobs which come from the side of the ordnance and do bear them up upon the cheeks of the carriages.

Trusses are ropes which are made fast to the parrell of the yard, and are used to two uses :

one to bind fast the yard to the mast when she rolls either a-hull or at an anchor ; the other is to haul down the yard in a storm or gust. These belong only to the main-yard and fore-yard, and they are brought-to but upon occasion ; and also to the mizen, which hath ever a truss.

To **Try.** Trying is to have no more sail forth but the mainsail, the tack aboard, the bowline set up, the sheet close aft, and the helm tied down close aboard. Some try with their mizen only, but that is when it blows so much that they cannot maintain the mainsail. A ship *a-try* with her mainsail (unless it be an extraordinary grown sea) will make her way two[1] points afore the beam ; but with a mizen not so much.

The **Tuck.** The word is significant, for it is (as you would say) the very gathering up of the ship's quarters under water. If it lie low, that makes the ship have a fat quarter, and hinders the water from passing swiftly to the rudder. If it lie high, the ship must be well laid out in the quarter, else she will want bearing for her after-works, which being so high and weighty do charge a ship much.

To **Turn,** vide **Board.**

V

Veer. To veer out a rope is to put it out by hand, or to let it run out whenas you may stop it ; as *veer more cable,* that is let more run out. Veer, it is generally used to the letting out of more rope to those ropes which are used without board (as to the boat-rope, log-line, or any rope

[1] **D, H** read ' four.'

whereby we tow anything), but it is not used to any running rope, but only to the sheets. *Veer more sheet,* that is, put out. When the wind doth go in and out, that is sometimes to one point, sometimes to another, and that suddenly (as in the storms it will very much) they say the wind doth *veer and haul.*

Veering. When a ship sails, and the sheet is veered out, we say she *goes veering. Vide Large* and *Quarter winds,* for it is all one.

A **Violl.** When the anchor is in such stiff ground that we cannot weigh it, or else that the sea goes so high that the main capstan cannot purchase in the cable, then, for more help, we take a hawser and open one strand, and so put into it nippers (some seven or eight, a fathom distant from each other) and with these nippers we bind fast the hawser to the cable ; and so bring this hawser to the jeer capstan and heave upon it, and this will purchase more than the main capstan can. The Violl is fastened together at both ends with an eye and a wale knot, or else two eyes seized together.

W

Waft. *To waft* is to guard any ship or fleet at sea, as we call Men-of-War which attend merchants, to conduct them safe along, *Wafters.* Also *wafts* are used for signs to have the boat come aboard (which is a coat, gown, or the like hung up in the shrouds). Also it is a common sign of some extremity when a ship doth hang a waft upon the mainstay.[1] Any blanket, gown

[1] **D, H** continue, 'either that it hath sprung a leak or is in some distress,' omitting the last paragraph.

or the like hung out for a sign is called a waft, which if it be hung upon the mainstay is a sign that the ship hath sprung a leak or is in some distress.

[**Waist** is that part of the ship which is between the mainmast and the forecastle.]

Waist-boards are the boards which are set up in the waist of a ship, betwixt the gunwale and the waist-trees ; but they are most used for boats, to be set up alongst the sides to keep the sea from breaking into them.

Waist-cloths. By a general term all the cloths which are round about the cage work of the hull of the ship are called waist-cloths, and are the same that are called the *fights* of the ship.

The **Wake.** The wake of a ship is the smooth water which the ship doth make astern her, showing the way that the ship hath gone in the sea. By this we give a judgment what way the ship doth make, for if the wake be right astern then we know she makes her way good, as she looks, but if the wake be a point, two, or more to windward,[1] then the ship goes to leeward of her course. When a ship doth stay a-weather her wake, that is when she doth not fall to leeward at her staying, but doth it quickly, and then when she is tacked the wake is to leeward, it is a sign she feels her helm well and is a nimble ship. In chasing they say we have *got her wake*, that is we are got as far into the wind as she, and so go right after her as she goes.

Wale, vide **Bend.**

Wall-reared. That is when a ship is built right up, after she comes to her bearing. This

[1] So **B,** but **D, H, Z** read 'leeward,' which is clearly wrong.

is unsightly and (as they term it) not ship-shapen, but it makes a ship within board much the roomier, and not the less wholesome ship in the sea if her bearing be well laid out.

Walt. A ship is said to be walt when she hath not ballast enough to keep her stiff to bear a sail.

A **Warp** is any rope which is used to warp a ship, which most commonly is a hawser.

To **Warp** is to have a hawser or any other rope (sufficient to haul up the ship) and an anchor bent to it, and so to lay that out over the bar over which we are to go, and so by that to haul the ship forward. It is used when we want a wind to carry us out or into a harbour, and this is called warping.

To **Wash a Ship.** That is used at sea when we cannot come aground or careen her. We make her heeled over, with her ordnance and men upon the yard arms, to a side ; and so wash that side and scrape it, so much as is out of the water, which is commonly some five, or six, strakes. This is done in calms or in a smooth road.

Wash of the Shore. That is, close by the shore.

Watch. At the sea the ship's company is divided into two parts, the one called the *starboard watch*, the other the *larboard watch*. The Master is the chief of the starboard, and his right-hand [1] mate of the larboard. These are in their turns to watch, trim sails, pump and do all duties for four hours ; and then the other watch is to relieve them. Four hours they call a whole

[1] The first mate : *cf.* 'right-hand man,' the principal non-com. officer in a troop of horse.

watch. In Harbour and Roads they watch but quarter watch, that is when one quarter of the company do watch at a time.

Water-borne. That is, when a ship is even just off the ground that she floats ; then she is water-borne.

The **Water-line** is that line which the ship-wrights do pretend should be the depth that the ship should swim in when she is laden, [both ahead and astern ; for you must know a ship never draws so much ahead as she doth astern, for if she should she would never steer well].[1]

Water-shot is a kind of mooring ; that is to lay the anchors not cross the tide nor right up and down the tide, but (as you would say) betwixt both, that is quartering.

The **Water-way.** That small piece or ledge of timber which lies fore and aft on all the ship's decks close by the sides (which is to keep the water from running down there) is called the water-way.

Waving is making a sign for a ship or boat to come toward them, or else to go from them ; as the sign is made either towards or fromwards the ship.

Way of a Ship. The rake and run of a ship are called her way forward on or aftward on.

[1] These words do not appear in **D** and **H**, which read : ' Where note that they ever project their ships to draw more astern than ahead ; for if a ship draw more ahead than astern, if it chance to touch the ground should not come off so easily as otherwise. But the reason why many times they are forced to put her deeper into the water is for that her flat floor is carried so far aft, and her tuck laid so low, that the water cannot come quick to the helm and then, to mend her steerage and her way, they are constrained to raise her so much out of the water ' (*i.e.* put her deeper ahead and raise her astern).

Also when she sails apace they will say the ship hath *good way*, *fresh way*, or the like. Likewise in casting the dead reckoning, they allow her *leeward way*, that is so much as she drives to leeward from that she seems to go.

To **Weather.** That is, to go to windward of a place or ship. Sometimes we are embayed so that we cannot weather a headland to get clear, and then we must do our best to turn in and out till we can have a fair wind or claw it off.

Weather Bow. That is the bow next the weather; and so of all parts of the ship or anything that is to the windward-most side we say it is the *weather part* or *a-weather*, etc.

Weather coil is when a ship is a-hull, to lay her head the other way without loosing any sail, which is only done by bearing up the helm. It is an excellent condition in a ship, for most ships will not weather coil. The use of it is that when we desire to drive with her head the other way a-hull, then we need not open any sail, wherewith before the ship can come to wear she will run a great way to leeward, when once she is before the wind and sea under sail.

Wedges. We use to make fast the mast in the partners with wedges, and also to put a wedge into the heels of the topmasts, to bear up the topmast upon the trestle-trees.

The **Whelps** are like brackets set to the body of the capstan close under the bars down to the deck, and are they which give the sweep to the capstan. These are made so in parts that the cable may not be so apt to surge, as it would if it did run upon a whole round body.

The **Whip** is that staff which the steersman doth hold in his hand whereby he governs the helm and doth port it over from one side to

another. It hath a ring at one end which is put over the end of the helm and so comes through the rowl up into the steerage. In great ships they are not used, for by reason of the weight of the rudder and the water which lies upon it in foul weather they are not able to govern the helm with a whip, because conveniently there can stand but one man at the whip.

Wholesome.[1] We say a ship is a wholesome ship in the sea when she will hull, try and ride well at an anchor, without rolling or tumbling and labouring much in the sea. A long ship which draws much water will hull well, try well, and ride well. If she draw much water and be short, she may hull well, but neither try well nor ride well at an anchor. If she draw little water and be long, she may ride well and try well, but not hull well. If she be short and draw little water, she will neither hull, try nor ride well, and therefore those are the most unwholesome ships. Note also that the housing-in or laying of the upper works of a ship do much ease or wrong her in all these manner of workings; but however the over carrying of her is bad for all, and makes her more laboursome than otherwise she would be.

Whoodings. The planks which are joined and fastened alongst the ship's sides into the stem, are called the whoodings.

To **Wind.** To wind a ship is to bring her head about, either with the boat or with some oars out at her hawse, or stern ports (if she be a small ship). The ship *winds up*; that is when she comes to ride by her anchor. When they are under sail they use to ask *how winds the ship*;

[1] 'Howlsom,' 'Holesom'; appearing under H.

that is, upon what point of the compass doth she lie with her head.

Winding tackle. The winding tackle is thus fitted: a great double block with three shivers in it, which is fast seized to the end of a small cable, which is brought about the head of the mast and so serves for a pendant; this hath a guy brought to it from the foremast. Into the block there is reeved a hawser, which is also reeved through another double block having a strap at the end of it, which strap being put through the eye of the slings is locked into it with a fid, and so hoists the goods. The fall is reeved into the snatch block, and so brought to the capstan whereby they heave in the goods.

A **Windlass** is a piece of timber having some six or eight squares,[1] and is placed from one side of the ship to the other close abaft the stem aloft, where the cables come in. These are never used in our great ships, but the Flemings do use them in good ships. The reason is for that they go very slightly manned, and the windlass doth purchase much more than a capstan, and with no danger to the men. For the windlass they heave about with handspikes put into holes made at either end; and though they cannot heave forward, or one should fail, the windlass will pawl itself. But at the capstan, if any fail, it may be the rest will be thrown from the capstan and their brains beaten out against the ship's sides, if they weigh in a sea-gate; but the capstan doth purchase faster by much [and therefore we (having men enough to man it) do use that]. They have a windlass also in the head of the boat, to weigh the anchor by the buoy rope.

[1] *I.e.* with six or eight faces to the spindle.

Wind-taut. Anything that holds wind aloft, which may prejudice the ship's sailing or riding, is said to be wind-taut (as too much rigging, high poops, and the like). Also when we ride in any great stress we bring our yards alongst-ships, strike down our topmasts and the like, because they hold wind-taut, that is, they hold wind stiffly (for taut is as much as stiff in the sense of the sea language: as *set taut* the shrouds, that is, set them stiff).

Wood and Wood. That is when two timbers are let into each other so close that the wood of the one doth join close to the other.

To **Woold,** or **Woolding** is to bind ropes about any mast, yard, or the like, to keep on a fish, or somewhat to strengthen it. Sometimes when the whoodings give way by the over-charging of the boltsprit, they are fain to woold to the bows; which they do by passing a cable through both sides, and so bringing it in again, and with handspikes to twist it together as strong as may be. We never fish any mast or yard but we woold it also, and that is called the woolding of the mast or yard. Also these ropes which come from the beakhead over the boltsprit and lash it fast down from rising off the pillow (the pillow is the timber which the boltsprit bears upon aloft, close by the stem[1]) are called the wooldings of the boltsprit.

A **Worm** is an iron on the end of a staff, wherewith we draw out the shot of a piece, if there be any occasion.

Worming is the laying of a small rope or line alongst betwixt the strands of a cable or hawser. The use whereof is to help to strengthen the

[1] These words are not in **D, H,** or **Z.**

cable or rope to which it is used. The Flemings use this to new ropes; others to old ropes that are almost decayed.

Y

Yard. As the length of the masts are proportioned by the breadth of the beam, so contrariwise the length of the yard is proportioned by the length of the keel. The proportion of this is not absolute, for he that will have a taunt mast may have the narrower yards (and so contrary); but the best and most absolute that is agreed upon is this: the main-yard of the ship is to be $\frac{5}{6}$ parts of the length of her keel; the topsail-yard is to be $\frac{3}{7}$ of the main-yard, and the main-yard for bigness is to be $\frac{3}{4}$ of an inch for a yard in length. The length of the fore-yard is to be $\frac{4}{5}$ of the main-yard. The cross-jack-yard and spritsail-yard is to be all of a length, but allow the mizen-yard and spritsail-yard $\frac{1}{2}$ an inch thickness to a yard in length. *Top the yards*; that is make them hang even. The clew lines do properly top the main and fore-yards, but when the topsails are stowed then the topsail sheets will top them. *Brace the yard*; that is traverse aft that yard-arm whose brace is hauled; and by the braces we *square the yards*; that is make them hang right across, and one yard-arm not traversed more than the other. If the shrouds be set too forward they will hinder the traversing of the yard. *Traversing the yard* is to brace aft the yard.

A **Yaw.** When a ship is not steered steady, but she goes in and out with her head, they say she yaws. This doth much hinder a ship's way, and therefore when a Man-of-War is in chase he

doth put such to the helm who can keep her steadiest and evenest upon a point ; which is done only by care and judgment, to meet her with the helm, before her head fall off, or else come to.

A **Yoke.** When the sea is so rough that men cannot govern the helm with their hands, then they seize two blocks to the helm on each side at the end, and reeving two falls through them like gunner's tackles, bring them to the ship's sides ; and so having some at one tackle, some at the other, they govern the helm as they are directed. There is also another way with taking a double turn about the end of the helm with a single rope, the end being belayed fast to the ship's sides ; and by this they may guide the helm, but not with so much ease as the other way. Now either of these is called the yoke to steer by.

DOCUMENTS RELATING TO
MAINWARING'S NEGOTIATIONS ON
BEHALF OF THE VENETIAN REPUBLIC

AN ESTIMATE FOR CONSTANT
GUARD OF THE NARROW SEAS

JEAN CHEVALIER'S SKETCH OF
SIR HENRY MAINWARING

GENTLEMEN AND TARPAULIN
COMMANDERS

NOTE ON THE FAMILY OF
SIR GEORGE MAINWARING
OF IGHTFIELD

DOCUMENTS RELATING TO MAINWARING'S NEGOTIATIONS ON BEHALF OF THE VENETIAN REPUBLIC

i. 'The Memorial of Sir Henry Mainwaring to the Doge, 25th of January, 1619.' [1]

MOST SERENE PRINCE,—Last Christmas day the Secretary Lionello [2] and Michielini [3] another Italian gentleman who speaks English came to see me and ask if I would accept a good appointment. I said: Yes. They asked me if I would oblige the Venetian Republic by supplying particulars for the ordering of some ships already granted by his Majesty, that I should have the command of these and of others when I reached the Gulf of Venice, and that I should be satisfied with the terms. I asked if the need were pressing. They said that the matter required the utmost possible despatch. Accordingly on the following morning I searched the River Thames for suitable ships. Seeing that there were none suitable at the moment, I told Michielini of their nature. He said that these ships were to transport some

[1] *State Papers Venice*, 1617–19, ed. A. B. Hinds, No. 713. (The original is in Italian.)

[2] Venetian Secretary in England.

[3] Lunardo Michielini.

companies of English and they were to have more ships from the Low Countries and they would have to be satisfied with the ships at present in the river. On hearing this, I advised them either to buy those ships altogether, or at least to furnish them themselves and not by the owners, with sailors and victuals. But they were dissuaded from this by the advice of others, possibly to their disadvantage.

Owing to my going up and down, rumours got about that I was to command the fleet. When I asked your Serenity's ambassador about it, he replied that he had no authority to appoint a commander-in-chief, but he had informed the republic of my zeal and was awaiting their reply.

This moved me to beg his Majesty to tell the ambassador his opinion of me in a few lines, but his Majesty, of his own accord, decided to honour me more and sent the Earl of Montgomery[1] to tell the ambassador that as his Majesty had granted the ships asked for, he hoped that the republic would allow one of his subjects to command them, and suggested me as one fitted by long experience and offered to pledge his word for my good behaviour. The ambassador said that he had not sufficient authority, but he hoped that the republic would gratify his Majesty and promised to write. He persuaded me to come here by land, promising to write all these things to your Serenity, and give you some idea of my

[1] Philip Herbert, Earl of Montgomery and fourth Earl of Pembroke, born 1584. Gentleman of the Privy Chamber, 1603–25; Keeper of Westminster Palace, 1617; Lord-Lieutenant of Kent, 1624; Lord Chamberlain of the Household, 1626. Sided with the Parliament in the Civil War and died in 1650.

personal expenses in the matter. At the time, the ambassador, though a man of the greatest diligence, judgment and temper, was much worried by his negotiations with our sailors, who are mostly a rough lot. These circumstances have led me to come to your Serenity. I should have come before but for the opposition of the Spanish ambassador. I now understand that the command of the ships has been entrusted to one of your nobles, therefore I only beg that in case you need further vessels from our ports your Serenity will employ me. Above all, I ask your Serenity to decide quickly, as my personal affairs demand this.[1]

HENRY MAINWARING.

ii. 'Statement of Antonio Foscarini regarding his interview with Mainwaring.'[2]

He (Mainwaring) first repeated matters contained in his letter. He said that when the Spanish ambassador [3] heard about it he had gone to the Council chamber to the King himself to stop him going. He asked if as much would be conceded to his own King. They told him your Excellencies were arming for defence. To give some satisfaction in appearance the King ordered Mainwaring to defer his departure until the

[1] Endorsed 'That the Captain-General at sea give his opinion on the above letter.'

[2] *Cal. of State Papers Venice*, 1617–9, No. 716, translated from the Italian by Mr. A. B. Hinds. Foscarini had received instructions from the republic to interview Mainwaring, and the above is the information he sent to Venice regarding his conversations with him.

[3] Gondomar.

Spanish ambassador had left. The Spanish ambassador reached Dover soon after him and expressed pleasure that he had not gone, and said that he would have fared badly as he had sent orders to all ports subject to his King for his detention. He argued against Mainwaring serving your Excellencies, offering him a pardon and an honourable post under the Catholic King. He said that if the Duke of Ossuna had been given a free hand he would have taken Venice already, but it will come: your Excellencies will soon be consumed and will fall into his King's hands, and it will soon appear which has most gold, the Indies or your treasury. He said this contemptuously, adding: They will speak Spanish soon at Venice, speaking slightingly of your Excellencies. He told me all this at different times in various conversations.

After the ambassador left he started, but finding himself in danger in Flanders, he returned to England. He then sailed in a small ship from the Isle of Wight to [. . .][1] in Normandy, and passed through France and Savoy, being welcomed by the Duke at Turin.

I discovered that hardly had he arrived here than he was told all manner of ill of the government, that he would get no employment for a long time, and then only a base one; and he would be treated like a common sailor, without character or honour. This moved him greatly and induced him to obtain a letter from his King to offer his services and to go back at once. I spoke suitably and think I produced a good impression (here follows a summary of Mainwaring's 'considerations'[2] which Foscarini enclosed). He said your Excellencies were under

[1] Blank. [2] See Vol. I, pp. 52–56.

two disadvantages in arming in England: firstly, in point of time, as the merchants were arming to send to divers parts; secondly, by hurrying things on, the men raised their terms every day foreseeing that if peace followed your Serenity would not have them at any price, and if war you would not be able to consider a little more or less. If your Serenity wishes to arm it would be better to begin early, as in March a number of ships are prepared in England for the East Indies, Greenland, and Newfoundland, a fleet for each. The seven ships now engaged cost about 180,000 ducats a year and the large ones would cost less than 70,000. He would undertake the command and get his King to guarantee his fidelity.

In buying vessels he said it would be better to go to the Low Countries for the ships, their tackle and gunpowder, which are cheaper there; for cannon shot and victuals to England. In any case he would always get the money from merchants, if the republic paid in good time. This would increase the number of ships of great draught in his city.

He told me that if the needs of your Serenity become greater, as seems likely, the same money which is spent on the seven ships would allow him to obtain four large ships from his Majesty, which he thinks he could easily get and they would suffice with but little help, to meet all the galleys that Ossuna possesses. He said if your Serenity wished to make such a request of his King it would be necessary to say a word to the ambassador here, and it would be advisable to ask for ten for emergencies, and you would be sure to get four or six at least. You should thank his Majesty for the seven merchant ships,

but add that they cost a great deal and are not suitable. The Duke of Ossuna should be considered a pirate by all princes, and if the King of Spain authorises his actions he is waging war on the republic. However, the King need not notice this because his Majesty does not wish to show himself clearly in this. You should promise to restore the ships in as good condition as they were sent, promising reparation if any be lost. . . .

He told me that he is of a well-known family, Lieutenant of the Lord Zouch in the Cinque Ports, Lieutenant of Dover Castle[1] and a gentleman of his Majesty's privy chamber. He would devote all his energies to this and would hope for success through his influence at Court . . . He would have the ships armed and fully equipped for setting out within two months from the day that the King gave the order. He needed that time to make enquiries. . . . He would undertake the matter and see that the King promised the ambassador of your Serenity that he would serve faithfully and keep his promises, and the King would write the same to your Serenity.[2]

[1] This is incorrect; though Mainwaring may have been promised the post as early as 1619, there is no evidence of his having been appointed till February 1620. (See his letter to Zouch, February 21, 1620, also the Mayor of Dover's congratulations in *State Papers Dom.*, cxii. 95, 96.)

[2] The Republic afterwards wrote that they esteemed most highly the royal promise that Mainwaring would render faithful service, a point which was also emphasized by Sir Henry Wotton, the English ambassador in Venice (*S.P. Venice*, 1617–19, No. 718).

iii. Sir John Finett's account of the negotiations respecting Sir Henry Mainwaring's employment in the Venetian service.[1]

'In March, 1617.[2] The Earl of Montgomery, Gentleman of his Majesty's Bedchamber, was pleased to entreat my Service and company with him to the Venetian Ambassador Signor Contarini, his Lordship being sent to him from the King with a Message in the behalf of Captain Mainwaring, which I delivered by interpretation from his Lordship's mouth to this purpose.

'His Majesty understanding what present use the State of Venice had of men for their Service, and desirous to shew his affection towards them, in giving them his leave to raise certain companies here for their War, had taken further notice, that since they were to have Land-men to be commanded by Sir Henry Peyton, and ships from hence for their Convoy to Venice; he thought fit to Recommend for command, and conduct of those Ships, Captain Mainwaring, a Gentleman that he had made special choice of, and held most fit for that employment; and though the Ambassador might have heard, perhaps, that heretofore the said Captain Mainwaring had followed the not approved course of a Pirate, it was in his unsettled years, and more desperate fortune, but that now his Majesty knew him to be so reclaimed, as if he should himself have present use of such a Commander, he would employ him as soon as any other of his Subjects, and would take it for an Argument

[1] In his *Finetti Philoxensis*, 1656, pp. 49–51. Sir John Finett was Master of the Ceremonies to James I and Charles I.

[2] *I.e.* Old style, really 1618.

of that Common Weales respects to him, if they would upon his recommendation entertain him. For doing which, they should find him more forward hereafter to further, and assist them in any the like occasion, when he should see that at his request they had made use of so fit a Subject for their Service.

'To this the Ambassador made answer, that the Republic was much obliged to his Majesty for his so gracious notice, and furtherance of their Assignes, and in particular for recommending one to their Service, whom he himself, and the World knew to be so worthy, and whom he had already recommended to that State for employment, but had as yet received no answer, which daily expecting, he must beg pardon if he did yet attend it without giving his resolution. My Lord replied, that the King had been informed that the Ambassador had full Commission, and power to employ whom he should be pleased, and that with that liberty he might (he thought) admit of the Captain. The Ambassador disclaimed, that he had any such liberty, and said, that on the contrary he had order from the State to send the Ships away without any other Commander than such as were to go along with them to govern them, in regard they had a Commission with them not to offend or assail any they should encounter at Sea, but if they should be assailed, then to defend themselves as they might with the power that was to go along with them.

'In conclusion, his Lordship fell to demand (that since Captain Mainwaring could not have the command that his Majesty thought to prefer him to) whether the Ambassador would not let him assure the King (as from the Ambassador himself) and in the name of the Republic, that

if there should be hereafter any other employment, suiting with the condition of Captain Mainwaring, that he should have the offer of it before any man ? The Ambassador assured his Lordship he might rest upon that, both for the respect, that the Republic (he knew) carried to his Majesty's Recommendation, and for the merit also of the Gentleman then Recommended, whom he had already (as he had said) by his Letters presented to the State for his valour, and forwardness to do them service.'

iv. Mainwaring's suggestion regarding the loan of warships to the Venetian Republic, 1619.[1]

'For the right honourable my singular good Lord, the Lord Marquis of Buckingham, Lord High Admiral of England.

'Right Honourable may it please your Lordship,—The Venetians' request to his Majesty is only for the loan of some of his Majesty's ships, and they to bear the charge of waging and victualling the men, giving security to restore, or repair them if they decay in their service. Their Ambassador hath no direction to proceed upon the demand of these ships, but by notice from me ; that his Majesty will be willing to furnish them (it pleased them to trust me with their whole secret concerning this despatch). And therefore if I might know his Majesty's inclination, I could save him the denial, or make it appear how his Majesty may do them a greater favour than they expect in setting out these ships, and save himself a great charge in fitting

[1] *S.P. Dom.*, Jas. I, cv. 148. The letter itself is undated.

them, and effect his own design upon their charge. His Majesty may pretend to lay down any suspicion of this fleet (*i.e.* the Spanish) in regard of himself, and therefore that he will desist from fitting his own ships. But if the Venetians will be at the charge, they may have order to go forth with this Commission; that if the Spanish fleet bear in with the Straits they may follow them, and so stand for the Gulf (*i.e.* of Venice), whether (though they follow the fleet into the Straits) they will arrive first; because the Spanish fleet must of necessity stop at Messina. If the Spanish fleet go not to the southward, then the Venetians have no need of a supply, and the ships are ready to proceed upon his Majesty's own designs. But if the Spanish fleet should dissolve, the ships being forth, might be employed against the Turkish pirates, wherein your Lordship would merit and gain a fame proportionable to your singular virtues, who in the first entrance to your most honourable office do show yourself so great a Patron over your Country.

'It shall be no dishonour for the King to let them bear the charge of fitting the ships, and the favour is great to them, for by lending of his Majesty's ships they save half of the whole charge which now they are at in other ships.[1] Besides this business may be negotiated privately betwixt the Ambassador and me who hath direction to agree with me both for victualling and waging the company. And he is (in case his Majesty will favour them with his ships) to signify unto his Majesty their good opinion of me. And that it is their desire, if I shall be found in so good

[1] The English merchantmen that had been hired.

estimation with his Majesty, that I should command those ships. But I urge not my particular [suit] [1] who do only aim at the public service. And for myself will be willing in any condition whatsoever to serve his Majesty and your Lordship with all humble and affectionate service.

'Your Lordship's in all duty
'to be commanded,
'H. MAINWARING.

'I humbly beseech your Lordship to do me the favour to let me know his Majesty's pleasure, and your Lordship's commands.'

[1] Word omitted in the original.

AN ESTIMATE FOR CONSTANT GUARD OF THE NARROW SEAS[1]

At Star Chamber 17mo Februarii 1626-[7].

By the Lords, and others Commissioners for his Majesty's Navy.

Present :—

Lord Admiral	Lord Herbert	Sir H. Mainwaring
Earl of Lindsey	Mr. Aylesbury	Mr. Crowe
Earl of Denbigh	Sir Robert Cotton	Capt. Pennington
Lord Harvey	Sir Sackville Trevor	Capt. Gifford.

Proposition for number of Ships with 2 Tartanes, or Pinnaces to be built, and made complete for guarding of the Narrow Seas ; with estimate of their charges, as also the necessary expenses in victuals, and wages for men to be employed in the same, vizt :—

For the Hulls of 18 Ships to be built, whereof

Five Ships of 600 Tuns at £6 per Tun	£18,000	0	0
Five of 400 Tuns at £6 per Tun .	£12,000	0	0
Four of 300 Tuns at £5 per Tun .	£ 6,000	0	0
Four of 200 Tuns at £5 per Tun .	£ 4,000	0	0
Sum Total . .	£40,000	0	0

[1] Brit. Mus. Addit. MSS. 9294, fol. 193.

For Rigging and fitting these 18 Ships for service in all particulars, ordnance excepted .	£26,666 13 4
Sum Total for the Hulls and Rigging ; Ordnance excepted. .	£66,666 13 4

For the building, rigging, and complete furnishing of 2 Tartanes, or Pinnaces, with a Deck ; to go with Oars and Sails, of 12 or 15 Tun, and 12 banks on a side, and 2 pieces of Ordnance for trial of their use, and service	£200 0 0

Number of Men proportioned to every of the 18 Ships for service abroad, vizt :—

To the 5 Ships of 600 Tuns 250 Men a piece . . .	1,250 Men
To the 5 Ships of 400 Tuns 200 Men a piece . . .	1,000 Men
To the 4 Ships of 300 Tuns 120 Men a piece . . .	480 Men
To the 4 Ships of 200 Tuns 80 Men a piece . . .	320 Men
Whole number of Men	3,050 Men

For wages, and victuals for the 3050 Men at £2 per mensem every Man, and 28 days in the Month, comes in all to . . .	£6,100 0 0	per Mensem
For one whole year 13 Months to the year	£79,300 0 0	

JEAN CHEVALIER'S SKETCH OF SIR HENRY MAINWARING. (*c.* 1646–47).

JEAN CHEVALIER, born in 1589, was a *vingtenier*, or tything man of St. Heliers, Jersey. A moderate royalist, he carefully noted all the principal events of the Island, during the period in which he lived, and his chronicle, which is entitled: 'Journal et Recueil de choses remarquables en l'isle de Jersey, arrivées pendant les Guerres Civiles sous les regnes des Rois, Charles Premier, et Charles Second,' was acquired by Dr. S. E. Hoskins, and forms the basis of that author's work on 'Charles II in the Channel Islands,' published in 1854.[1]

Chevalier relates so many particulars of Mainwaring's early career, as to lead to the surmise that they must have lived on very intimate terms, 'an intimacy which may perhaps account for much of the secret history' that Chevalier relates.[2] This Journal is remarkably curious, both for its disregard of proper names and its quaint orthography, and Mainwaring figures as

[1] Jean Chevalier died November 30, 1675, at the age of eighty-six. Dr. Hoskins' manuscripts were reported on by the Historical Manuscripts Commission (2nd Report), where extracts from Chevalier are given. Chevalier's *Journal* has now been issued by the Société Jersiaise, under the title of *Journal de Jean Chevalier*, 1643–57.

[2] *Hist. MSS. Com.*, ii. p. 161.

'sire hanry mannery.' Dr. Hoskins transcribed parts of it into English, and it is from his work stated above that the following is extracted:

Sir Henry Mainwaring, a man between seventy and eighty years of age, who had been a terrible pirate in the flower of his youth, consorting with the King of Morocco, and carrying into his ports all prizes captured by him from English, French, Spaniards, and Flemings, indiscriminately. By such corsair-like pursuits he contrived to amass immense riches in gold and silver, and owned a large fleet of galleys, which was for a long time the terror of all traders navigating the Straits. Reiterated complaints of the intolerable depredations committed by this redoubtable pirate were made to James the First of England, who at length despatched an envoy to Morocco, threatening on the one hand to send out a fleet sufficient to overwhelm him, even in the harbours of his ally; on the other, offering him a free pardon on his royal word if he would abandon his piratical proceedings and come to England.

Relying on the royal promise, Mainwaring accepted the offer of pardon and came to England, bringing over with him a considerable sum of money, which he presented to King James. His Majesty graciously took him into his service, appointed him to the command of one of his ships of war, and knighted him. Sir Henry Mainwaring at this time lived in great state, entertaining a large retinue when on shore; but on his coming to Jersey he was as poor as the rest, with only a single person, his own nephew, to attend him.[1]

---

[1] *Hoskins*, i. pp. 357–8. 'Sire hanry mannery hom̄e aage de–70-ou-80 ans il a voit este pirate en la fleur de la ieunesse se retirant a vecq le roy de marroque en turquie ou il menoit ses prinzes et les Js vandoit le quel prenoit sur les anglois sur les fransois sur les espagnols tout luy estoit de bonne prinze de sorte q̄l se vit quantitey de nauires an guerre et a massa force or et argant se faissant reDouter de tous les nauigans q̄ allois vers le destroit ayant des nauires en guerre p̄ flotes donc il y a voit de grands plaintes sur luy a loccasion

Mainwaring, being one of the few royalists who remained in Jersey after the departure of the Prince of Wales, no doubt entertained Chevalier with stories of his piratical days, and in a subsequent part of Chevalier's Journal is found an astounding recital of the 'heroic feats of Sir Henry.' How the Emperor of Morocco gave him a castle to protect his four and twenty galleys, their intimacy being such that they addressed each other as brothers! 'How by tricks and cunning stratagems he contrived to escape from the Spanish fleet; how at another time, being attacked by a superior force, and his shot expended, he beat off the enemy by loading his guns with pieces of eight. How he afterwards rescued Charles the First, then Prince of Wales, from being detained by the Spaniards, beguiling their grandees on board his ship, and then bringing them captives to England.'

de quoy le roy Jaques luy mandit ql san reuiensist an angleterre et ql auroit grace ou sil ne le faissoit quil anvoiroit ses nauires appres luy et quil auroit la possession de son bien sur la prolle du roy a vecq son pdon general que on luy porta il sanvint en angleterre ou il fut receu en grace le quel fit vn present aux roy Jaques de quantitey dor et dargent ayant a meney plussieurs nauires a vecq luy donc le roy le fit cheuaillier et capitaine en vn de ses nauires le quel lors quil estoit a terre a voit plussieurs homes a le suyure et maintenant il na q̃ vn sien neueu a vecq luy et peu de moyans' (*Journal de Jean Chevalier* (Société Jersiaise), pp. 293–4).

[1] *Hoskins*, i. p. 358, note.

GENTLEMEN AND TARPAULIN COMMANDERS

VERY few Gentlemen (though they be called Sea-men) do fully and wholly understand what belongs to their profession. . . And for professed Sea-men they either want ability, and dexterity to express themselves, or (as they all do generally) will, to instruct any Gentleman : If any will tell me why the vulgar sort of Sea-men hate land-men so much, either he or I may give the reason, why they are so unwilling to instruct them in their art.

Thus wrote Mainwaring in his preface to 'The Seaman's Dictionary, and his remarks dealt with a long-standing controversy between the professional seamen or 'tarpaulins,' who had acquired their knowledge through practical experience, and the so-called 'Gentlemen Captains,' who were ignorant of naval affairs, and who, through influence at court, or military service on the Continent, were frequently appointed to command a man-of-war. The evil existed long before Mainwaring's time, and Drake was one of the first who saw the deterrent effect it would have on sea service if there was not unity among the sailors and commanders. After the execution of Thomas Doughty, during the voyage of circumnavigation, Drake commanded his men on shore, and in a stirring speech addressed them thus :

'We must have these mutinies and discords that are grown amongst us redrest, for by the life of God it doth even take away my wits from me to think it ; here is such controversy between the sailors and gentlemen,

and such stomaching between the gentlemen and sailors, that it doth even make me mad to hear it. But, my masters, I must have it left, for I must have the gentleman to haul and draw with the mariner, and the mariner with the gentleman. What, let us show ourselves all to be of a company, and let us not give occasion to the enemy to rejoice at our decay and overthrow.'[1]

Sir William Monson wrote that the seamen were much discouraged by the preferring of young, needy, and inexperienced captains over them in their own ships. He goes on to state that the 'sea language is not soon understood, being only proper to him that has served his apprenticeship.'[2] Richard Gibson, who was a clerk in the Navy Office, and a contemporary of Pepys, records that 'it was once my happ to trace a gentleman captain's sea-journal of a 4th rate ship, in which I found he was at times 460 days in port, and but 164 days at sea, during the voyage.'[3] The seamen's desire was to be commanded by those who understood their labour, laws, and customs, and if they perceived that their commander was unable to speak to them in their own languages they were 'stubborn or perverse.' Monson informs us that the best ships of war in the world were commanded by captains bred to their profession,[4] and Gibson furnishes us with a list of 19 'tarpaulin' admirals who had risen to distinction 'from having been cabin boys.'[5] To be able to command his company 'both in fear and love,' as Mainwaring tersely puts it,[6] was not a

[1] Drake, *World Encompassed*, 1854, p. 213.
[2] *Naval Tracts*, iii. pp. 634–5.
[3] Printed in Charnock, *Marine Arch.* i. p. lxxxviii.
[4] *Naval Tracts*, iii. pp. 434–5.
[5] Charnock, i. p. xc.
[6] *Discourse on Pirates*, p. 44.

quality possessed by the majority of gentlemen captains. Whereas a 'tarpaulin' captain made himself familiar with his men, talking to them on the watch, and in foul weather cheering the most active of the crew with 'a dram of the bottle,' a gentleman commander had 'a sentinel at his cabin door (to keep silence in the belfry).'[1]

In the summer of 1630 Sir Henry Mervin, who was Admiral for the guard of the Narrow Seas, wrote that he had captains 'who knew neither how to command, nor how to obey,' and asked that Mennes might be appointed to the St. Claude, 'that he might once more have some captains that had passed their a, b, c.'[2]

When part of the fleet revolted to the King in the Downs in 1648, after refusing to acknowledge Thomas Rainborowe as their Vice-Admiral, two of their principal grievances were, that landsmen had been made sea-commanders; and that the insufferable pride, ignorance, and insolency of Rainborowe had alienated their hearts.[3]

One notable instance of the seamen's love for a 'tarpaulin' is worth recording—that of Sir Christopher Mings, who was mortally wounded in an engagement with the Dutch. After his funeral, a dozen lusty seamen who had served under him petitioned that they might be given a fireship, so that if possible they could do 'that that shall show our memory of our dead commander and our revenge.'[4]

[1] Charnock, i. p. xcii.

[2] *S.P. Dom.*, Charles I, clxxii. 42, clxxiii. 47. Afterwards the famous Admiral, Sir John Mennes. For other instances of this period, see *Advice of a Seaman*, by N. Knott (*S.P. Dom.*, Charles I, cclxxix. 106). [3] Penn's *Life*, i. 259.

[4] Pepys' *Diary*, June 13, 1666. For Lord Macaulay's criticisms on gentlemen captains of the time of Charles II, see his *History of England*, i. 300–5.

NOTE ON THE FAMILY OF SIR GEORGE MAINWARING OF IGHTFIELD

In the Loseley Chapel in the Church of St. Nicholas, Guildford, the burial place of the More family, there is an alabaster memorial to the two daughters of Sir William More. This is in two compartments, with an effigy of a lady in each, kneeling. The first is to his eldest daughter Elizabeth, while the second bears this inscription :

> This figure was erected in the memory of Ann, second Dar. of Sr. William More, who was married to Sr. George Manwaring of Ightfeild in Shropshire, Kt., and by him had Sr. Arthur, Sr. Hen, Sr. Thomas Manwaring, Kts., and George Manwaring, and two Dars. the elder mar. Sir Richard Baker Kt., and the younger mar. Sir John Corbet, Kt.[1]

Arthur, the eldest son, matriculated at Brasenose College, receiving his degree of B.A. the 7th of July, 1598, and that of M.A., 15th of June, 1601.[2] He was created a knight by James I on the 11th of May, 1603. From 1624 to 1626 he

[1] Manning and Bray, *Surrey*, i. 67.

[2] *Alumni Oxon.*, ed. Foster. Sir Arthur was also a donor of plate to Brasenose (*Quatercentenary Monog.* i. 15, 19).

sat in Parliament as member for Huntingdon, and was a well-known figure at court and a favourite of Prince Henry. Among other offices he held that of Lieutenant of Windsor Castle, and keeper of the Forest of Windsor.[1] He married Margaret, daughter of Thomas Denny, of Holcombe, Devon, and was succeeded in the Ightfield estates by his eldest son Charles, the father of Arthur Mainwaring, the famous wit and auditor of Imprests.

George, the third son, matriculated at Brasenose College, 19th of November 1602, aged fifteen.[2] During the Civil War he held Tonge Castle in Shropshire for the King, and the following letter from Prince Rupert to the Gentlemen Commissioners of the County sets forth his services in that capacity :[3]

GENTLEMEN,—It is known to you that Captain George Mainwaring, a gentleman of your own county, did for some time command in chief at Tonge Castle ; and it is by him signified to me that in regard there was no established pay for the command, he was, and still is, unrecompensed for his service. I desire you that he be paid out of the next contribution coming to the garrison of Bridge North, after the proportion of five pounds per week for the time of his continuance in that command, being from the 18th of July to the last of October 1644, by which he may be encouraged and enabled to apply himself to his Majesty's farther service, either in your parts or where else he shall be required.

I rest

Worcester, Your friend,

3rd December 1645. RUPERT.

[1] *S.P. Dom.* Charles I, cxxi. 13.
[2] *Alumni Oxon.*
[3] *Coll. topog. et genealog.* vii. 109.

Thomas, the youngest son, matriculated at Brasenose College, 31st May, 1616, aged seventeen, receiving his B.A., 6th June, 1616. He was called to the Bar in 1626, and was for some time Recorder of Reading, at which place he was knighted on the 29th of November, 1642. On the 20th of December in that year he was created a D.C.L. [1]

Of the two daughters, Anne married Sir John Corbet, Baronet, of Stoke-on-Tern, Shropshire, famous as one of the five patriots who opposed the forced loan of 1627. She was known as the 'Good Lady Corbet,' and had issue ten sons and ten daughters. She survived her husband twenty years, her death being recorded on the 29th of October, 1682.[2]

Margaret, the elder daughter, married Sir Richard Baker of Kent, the famous historian, whose monumental work, 'Chronicles of the Kings of England,' was published in 1643, two years before his death.[3]

[1] *Alumni Oxonienses* and *Brasenose Coll. Register.*
[2] *Dictionary of Nat. Biog.*
[3] *Ibid.*

INDEX

ABACK-STAYS

ABACK-STAYS, 197
Abaft, 86
Abbot, George, Archbishop of Canterbury, copy of the *Seaman's Dictionary* dedicated to, 80
Aboard, 101
A Cock-bell, 89
Advise boats, 43
Aft, 86
A-hull, 23, 142 179, 250, 255
A-lee, 179
Algiers, pirates of, 3–4, 25, 29, 43
  English compact with, 31 *n.*
  fortifications of, 29–30
Alicante, 30
Allowns, 193
Aloof, 87
Amain, 87
Anchor, 88, 199, 223, 251
  anchor stock, 90
  bowers, 89
  cat the anchor, 121
  kedge anchor, 88
  proportions, 88
  pudding of the anchor, 202
  sheet anchor, 88
  stream anchor, 88, 239
  various parts of, 88, 222
Anchoring, or Anchorage, 90, 237
Angelo, Cape, 28

BECALMING

A-peak, 197, 210
Arber, Professor, his edition of Capt. J. Smith's Works, 71
Arm, 91
Armado, 46
Arzilla, pirates at, 34
A-trip, 154
A-try, 142, 250
Awning, 91
Axletree, 92
Aylesbury, Sir Thomas, 274
Azores, pirates resort to, 37

BAKER, Sir Richard, marries Mainwaring's eldest sister, 284
Bale, 92
Ballast, 92
Barlow, William, his book on the loadstone, 191 *n.*
Bay, 93
Beachy Head, 54
Beacons, 106
Beak, or Beakhead, 93, 125, 129, 207, 209, 237, 258
Beams, 94, 126
Bear, to, 94
Bear in, 95
Bear off, 95
Beats, 124
Becalming, 114

BEDS

Beds, 96
Belay, 96
Bellamy, John, 75
Belle Isle, 40
Bend, a, 97
  to bend, 97
Be-neaped, 190
Bent, 149
Berth, 97
Berthing, 98
Bight, 98
Bilge, 98, 134
Bilge-water, 98
Billingsgate, 171
Biscay, Bay of, 93
Bittakle, 98
Bitter, 99
Bitter-end, 99
Bitts, the, 98–99, 238, 241
Black Rock, 47
Blocks, 100, 138
  names of, 100
Blow, 100
Bluff, or Bluff-headed, 101
Board, 101
Board and board, 24, 101
Boat, 103
Boat's gang, the, 103
Boatswain, 87, 103 *n.*, 135
  boatswain's store, 164
Bodleian Library, MS. of Mainwaring's Discourse of Pirates in, 6
Bolt-ropes, 101, 111, 134
Bolt-sprit, 105, 198, 207, 226, 235, 237, 245, 258
Bona, pirates at, 27
Bonnet. *See* Sails
Booker, John, 75
Boom, 106
Bougie, pirates at, 27
Boulter, Robert, 77
Bow, 106, 125, 207
Bower. *See* Anchor

BURLINGS

Bowlines, 107, 134, 161, 166, 173, 208, 241, 250
Bowse, 107, 242
Bowsprit. *See* Boltsprit
Braces, 108, 128, 203, 241
Brackets, 108
Brails, 108
Brasenose College, Oxford, 282–4
Brazil Fleet of Spain, 32
Breaming, 109
Breast fast, 110
Breast ropes, 110, 195, 213
Breech, 109
Breeze, 110
Breton ships. *See* Burtons
Brill, 55
British Museum, MS. copies of Mainwaring's Discourse of Pirates in, 4–5
  MS. copies of the *Seaman's Dictionary* in, 77–79
Brittany, 40
Brittany, Trade of (i.e. Passage de l'Iroise), 14
Bucket rope, 212
Buckingham, George Villiers, Duke of, Mainwaring dedicates his *Seaman's Dictionary* to, 70, 72–73, 81
  Mainwaring's suggestion to, regarding loan of warships to Venice, 271–3
  mentioned, 69, 274
Budge-barrel, 110, 120, 174
Bulge. *See* Bilge
Bulk, 110
Bulkhead, 111, 135, 200
Bunt, 111–112, 121
Bunt-lines, 111
Buoy, 112, 212
Buoyant, 112
Burlings Islands, pirates at, 32, 34

BURR

Burr shot, 225
Burtons (i.e. Breton ships), 32, 193 *and n.*
Butt, 113
  butt-heads, 113
Buttock, 113

CABLE, 113, 128, 194, 199, 209, 213, 237, 245, 250, 258
  pointing the, 200
  shot of, 225
  slatch of the, 227
  stoppers for, 238
  stream cable, 239
  the cable surges, 240
Caburns, 114, 213, 233
Cadiz, 32
Calm, 114
Calthorpe, Lord, MS. copies of the *Seaman's Dictionary* owned by, 81
Camber, 115
Cambridge University, MS. copy of Mainwaring's Discourse of Pirates in, 6
Canary Islands, pirates resort to, 34, 36
Cap, 115, 246
Cap squares, 116, 119
Cape Verde, 208
Capstan, 116, 163, 165, 183, 191, 196, 204, 228, 251, 255, 257
  kinds and parts of, 116–7, 231
  capstan bars, 117
  jeer-capstan, 169, 191, 231
  See also Crab
Captain, 87
  captain's cabin, 218
Card (sea), 117
Careening, 109, 117, 200, 253
  manner of, 118
Carling-knees, 119

CLEAR

Carlings, 119, 136
Carpenter, 125
Carriage. *See* Gun carriage, 119
Carthage, Cape, 29
Cartridges, 110, 119, 202
Carvells, 120
Carvell-work, 120, 127
Case, 120–1
Case-shot, 121, 123, 225
Caskets, 121, 146
Cat, 121
Cat head, 196, 213
Cat-holes, 122
Catharpings, 121
Caulk and Caulking, 122, 125, 195, 197
Chafe, 122
Chain shot, 225
Chains, 122
Chain-wales, 122, 223, 240
Chamber, 123
Channel, 123, 130
Charge, 123
Chase, 123, 202
Chase pieces, 125
Chatham, 115
Cheeks, 125, 167
Chess-trees, 101, 125, 129, 147, 182, 208, 240–1
Chevalier, Jean, his account of Mainwaring, 276–8
Chinching, 125
Choke, 126
Cinque Ports, Lord Warden of, licenses for the Sowe fishery granted by, 56
  fishery rights of, 58 *n.*
  Judge of the Admiralty Court of. *See* Newman, Sir G.
Clamps, 126, 211
Clavel, Richard, 75
Clear, Cape, 47

CLEAT

Cleat, 126
Clew, 126
Clew garnets, 126, 142
Clew-lines, 127, 142, 152, 203, 259
Clinch, 127, 214
Clincher, 127
Clinch-work, 120
Close fights, 147, 252
Clothe, 127
Cloyed, 127
Coaks, 128
Coamings, 128
Coats, 128
Cockswain, 103
Coil, 128
Coke, Sir John, Mainwaring's Discourse on the French fishing upon the Sowe presented to, 53
Collar, 129
Comb, the, 129
Compass, 98–99, 220–1, 247, 257
  fly of, 150
  needle of, 190
  points of, 199
  steering by the, 236
  various kinds, 129
Cond and Conding, 87, 96, 129–130, 164, 200
  See also Steer
Condor (conder), 87
Contarini, Venetian Ambassador, 269
Cook-room, 131–3
Corbet, Sir John, 284
  marries Mainwaring's younger sister, 284
Cordage, 133
  See also Ropes
Corvo, pirates at, 37
Cotton, Sir Robert, 274
Counter, the, 133, 146

DECKS

Course (of a ship), 133
  main course. *See* Mainsail
  fore course. *See* Foresail
Coxswain. *See* Cockswain
Crab (kind of capstan), 133
Cradle (ship's), 133–4
Craft (nets or lines), 134
Craft (small vessels), 134
Crank, 134
Crays, 134
Crete, pirates at, 28
Cringles, 108, 111, 134
Cross-bar shot, 134–5, 225
Cross-jack, 135
Cross-piece, 135
Cross-trees, 135, 172, 227, 248
Crow-feet, 135, 138, 210, 235
Crowe, Sir Sackville, 274
Cubbridge-head, 135, 196, 213
Cullera, 30
Culverin, 200
Culver-tail, 136
Cun. *See* Cond
Cunting, 136
Cut, 136
Cut-water, 137
Cylinder, 119, 137
Cyprus, pirates at, 28

DAVIT, 138
Dead-men-eyes, 129, 138, 165, 175, 205, 208, 226
Dead-water, 138
Decks, 94, 138–9
  coamings, 128
  first orlop, 126, 132, 139, 193
  forecastle, 135, 182, 189, 191, 202, 207, 212, 218, 245, 252
  half-deck, 135, 139, 211–12, 245
  lower decks, 128, 218

Decks (*cont.*)
poop, 108, 191, 193, 200, 228
quarter-deck, 139, 205, 211
second orlop, 139, 193, 211
settling the deck, 221
spar deck, 139
third deck, 211
upper deck, 121
Deep-sea-lead, 140
Deep-sea-line, 140, 229
Denbigh, Earl of, 70–71, 73, 74, 79, 274
Denmark, fleet of, 33
Denny, Thomas, 283
Desertas, pirates resort to, 36
Dieppe, 54
fishermen of, 56, 57, 59
governor of, 56, 63, 65
price of fish at, 61
Disembogue, 140
Dispert, 140
Dock, 141
Doughty, Thomas, 279
Dover Castle, 66
Mainwaring's *Seaman's Dictionary* compiled in, 73
Dover, Spanish Ambassador, at, 266
Drabler. *See* Sails
Drags, 141
Drake, Sir Francis, speech after Doughty's execution, 279–80
Draught, 141
Dredge, 141–2
Dredging, 142
Drift sail, 142
Drive, 142
Dublin, 39
Trinity College, MS. copy of Mainwaring's Discourse of Pirates at, 7
Duck-up, 142–3
Duller (i.e. moderate), 101

Earing, 143
Ease, to, 143
East Indies, 41, 267
Easterlings (ships of the Hanseatic ports), 32
Easton, Peter, pirate, pardoned, 21
Eddy, 143
Eddy-wind, 144
El Araish, 34
End for end, 144
English Channel, 123
Enter, 144
Entering ladder, 144
Entering rope, 144, 212
Eyelet-holes, 145, 176, 212
Eyes—
eye of the anchor, 145
eye of the strap, 145
See also Dead-men-eyes

Fairlight, 54
Fake (circle of rope), 128, 145
Falcon, Cape, 27
Fall-off, 145
Falls, 145
Farthell (furl), 108, 112, 121, 127, 146, 228
Farthelling lines, 146
Fashion pieces, 146, 246
Fassing (fraying), 200
Fathom, 146, 229
Fayal, 101
Faying (fraying), 185 *and n.*
Fender bolts, 146
Fenders, 146–7, 170
Fid, 147, 163, 231
fid-hammer, 147
Fidallah, pirates at, 35
Fights, 147
close fights, 147, 252

FINETT
Finett, Sir John, account of Mainwaring's negotiations with Venice, 269–271
Finisterre, Cape (North Cape), 32
Fire-balls, 147
Fire-pikes, 147
Fire pots, 144, 147
Fireworks, 147–8
Fish, price of, 61
Fish, a (piece of timber), 148, 258
fish the mast, 148
Fish, the (tackle), 148
fish-block, 148
Fisher, Benjamin, 71
Fisher, William, 77
Fishery, Mainwaring's Discourse on Rye, 53–66
Fish-hook, 148
Fishing, nets and lines, 134
See also Tramels
Fishmongers, Company of, 65
Flags, 148–9
Flagstaff, 116
Flare (of a ship), 149
Flaring, 167
Float, 149
Floaty, 25, 43
Flood, 149
Floor (of a ship), 149
Florence, Duke of, offers Mainwaring a pardon, 11
Flores, pirates resort to, 37
Florida, Cape, 194
Flow, 149–50
Flown, 150
Fluke, the, 150. *See also* Anchor
Flush, 150
Fly (of the compass), 150
Foot-hooks. *See* Futtocks
Forecastle. *See* Decks
Fore-foot, 150–1
GAUGE
Fore-locks, 116, 119, 151
Fore-mast. *See* Masts
Fore-peak, 197
Fore-reach, 151
Foresail. *See under* Sails
Fore tacks. *See* Tacks
Formentera, pirates at, 27
Former, 119, 151
Foscarini, Antonio, interview with Mainwaring, 265–8
Foul, 151–2
Foul water, 152
Founder, 152
Fowler (gun), 123, 228
Free, to, 152
French, evils of allowing them to fish at the Sowe, 53–66
talk of *Mare Liberum*, 64
Freshet, 153
Friesland, 39
Fur, or Furred, 153
Furl. *See* Farthell
Futtocks, 97, 153–4, 172, 208, 216, 227, 233

GAGING (jerking), 206
Gale, 154, 245
Galicia, ships of. *See* Gallego
Gallego boats (ships of Galicia), 32
Gallery, 133
Galleys, 246
Galligrosses, Venetian, 28
Galling, 112, 114, 122, 196, 199, 220
Garboard, 154
garboard strake, 154, 238
Garland, 129, 154
Garnet, 154–5, 216, 219, 227
Gaskets. *See* Caskets
Gata, Cape de, pirates at, 26–27
Gauge, 155

GENTLEMEN
Gentlemen and Tarpaulin Commanders, 279–81
Gibraltar, Straits of, 25
Gibson, Richard, on Gentlemen Commanders, 280–1
Gifford, Captain Richard, 274
Girding, a, 155
Godbid, W., 76–77
Gondomar, El Conde de, anxious to enlist Mainwaring's services, 12, 265–6
Goose-wing, 155–6
Goring, 126, 156
Gozzo, 28
Grapnels, 156
Grapples, 191
Gratings, 127, 156
  coamings of, 128
Grave, to, 156–7
Gravesend, 15
Greenland fleet, 267
Greenwich Reach, 208
Gripe, 157
Grommets, 121, 157
Ground, 158
  ground timbers, 158
Gudgeons, 228
Guest-rope, 103, 212
Guinea, 34
Guise, Duchess of, license to fish at the Sowe, 56
Gull, to, 158–9
Gun-carriage, 189, 231
  axletrees, 92, 119, 180
  bed of, 96
  bolts, 119
  cap squares, 116, 119
  cheeks, 119, 125
  forelocks, 116, 119, 151
  hooks, 119
  linch-pins, 119, 180
  trucks, 119, 230, 249
Gun room, 218
  ports of, 122, 246

HELM
Guns and Gunnery, 91, 95, 107, 109, 110, 119, 120–1, 123, 125, 127, 134, 137, 140, 147, 174, 175, 187, 189, 198, 200–2, 205, 207, 225, 230–2, 242, 245, 247, 258
Gunwale, 101, 159, 243, 252
Gurnards, 55
Guy rope, 159

HAILING, 159–60
Halibuts, 55
Halliards, 86, 135, 152, 160, 175, 207–8, 245
  main-halliards, 218
  topsail halliards, 128
Hand, or Handing, 160
Handspike, 160, 257
Hanseatic ports, ships of. *See* Easterlings
Harpings, 160
Harquebuss-à-croc, 198
Harvey, Lord, 274
Hatches, 127, 160, 221
  coamings of, 128
  hatchway, 160, 218
Haul, 161
Haul-yards. *See* Halliards
Hawser, 113, 161–2, 213, 251
Hawses, 114, 121–2, 161, 197, 199, 210, 256
Hayê, 160
Head. *See* Beakhead
Head-lines, 162, 212
Head-sails, 162
Head-sea, 162
Heave, to, 163
Heel (of a ship), 163
Heel (of the mast), 163, 224
Heeling, 219
Height (i.e. latitude), 32, 33
Helm, 130–1, 164, 234–5, 245, 255, 260

HERBERT
Herbert, Lord, 274
Hey—Ret, 85
Heywood (T.) and W. Rowley, *Fortune by Land and Sea* quoted, 15 *n.*, 43 *n.*
Hitch, to, 164
Hoâ, 160
Hodgkin (J. E.), MS. copy of Discourse on Pirates owned by, 7–8
Hoist, 167
Hold, the, 164, 201
Hold-off, 164-5
Honeycomb, 165
Hook again, 85
Hooks, 165, 211, 216
  sheer hooks, 222–3
Hoorn, 14
Horse (rope), 165–6
Hoskins, Dr. S. E., his *Charles II in the Channel Islands* quoted, 277
Hounds (of the masts), 125, 167, 210, 245
Housing-in, 166, 256
Howard, Lord Thomas, Earl of Suffolk, 46 *n.*
Hoyes, 134
Hull (of a ship), 167
A-hull, 23, 142, 179, 250, 255
Hulling, 167–8
Hullock, 169
Hurlock, Benjamin, 77
Hurlock, G., 76

Iceland, pirates resort to, 39
Ightfield, Shropshire, 282–3
Institution of Naval Architects, 81 *n.*
Ireland, pirates on coast of, 14–17, 33, 39, 40
  act for punishing (1612), 41 *n.*
  plan for suppressing, 46–48

LAMBETH
Iron-sick, 169–70
Iviza, 27

Jabea–Roads, 30
James I, dedication of Mainwaring's Discourse on Pirates to, 3, 9–13
Jeer, 116, 169
  jeer capstan, 169
Junk, 170
Jury-mast. *See* Masts

Keckle, or Keckling, 170
Kedge, to, 170–1
Kedger. *See* Anchor
Keel, 115, 165, 171, 206, 211, 237
  keel-rope, 171, 212
  scarf of the, 218
  skeg of, 226
Keelson, 171, 200, 227, 236
Ketches, 134, 171
Kevels, 172, 241
Kink, 172
Knave-line, 172
Knees, 97, 108, 125, 172, 207
Knights, 172–3, 208, 218, 224
Knittles, 173, 213
Knittlidge. *See* Ballast
Knots, 173, 222
  See also Wale-knot

Labour (to), 173–4
Lace, or Lacing, 174
Ladder, entering, 144, 174
Lade, to, 174
Ladle, 174
Lagos, Bay of, 34
Lambeth Palace Library, MSS. of the *Seaman's Dictionary* in, 80

LAMPEDUSA
Lampedusa, pirates at, 28
supposed scene of Shakespeare's *Tempest*, 28 *n.*
Land-fall, 174
Land-locked, 175
Land-to, 175
Land-turn, 175
Langrel, 175, 225
Lanniers, 138, 175, 205, 226, 237–8
Lanzarote, pirates resort to, 36
Raleigh at, 36 *n.*
Larboard, 130
larboard watch, 253
See also Port
Large, 175–6
Lash, or Lasher, 176
Lasking, 176
Latchets, 105, 145, 176
Latitude. *See* Height
Launch, 176
Lay a land, 177
Lead, heaving the, 166, 229
Leak, 177
Leconfield, Lord, MS. copy of the *Seaman's Dictionary* belonging to, 81
Ledges, 178
Lee, 178
A-lee, 179
Lee-fangs, 179
Lee-latch, 131
Leech (of a sail). *See* Sail
Leech-lines, 179
Leghorn, 21
Leigh-on-Sea, pirates at, 10
Le Neve, Peter, 72, 81
Let fall, 179
Levant, east wind blowing up the Mediterranean, 26, 30
Lie under the sea, 179–80
Lifts (ropes), 180, 197
Ligier (Ledger), resident agent or consul, 30

MAINWARING
Limbers, 180, 237
Lime-hound (bloodhound), 46
Limehouse Reach, 208
Linch-pins, 119, 180
Lindsey, Earl of, 274
Lionello, Venetian Secretary in England, 263
List, 180
Loadstone, 190–1
Lockers, 181
Log-line, 181
Long-boat, 103
Long Reach, 208
Longst-ships, 243
Longueville, Henry Yelverton, Viscount, 81
Loof, 125, 130, 182, 202
Loof-hook, 182, 208
Loom, 182
Loom-gale. *See* Gale
Lupo, pirates resort to, 37

MACHIAVELLI, his *Il Principe* quoted, 66
Mainsail. *See under* Sails
Main tacks. *See* Tacks
Mainwaring, Sir Arthur, 12
note on, 282–3
Mainwaring, Sir George, of Ightfield, note on the family of, 282–4
Mainwaring, George, note on, 283
Mainwaring, Sir Harry, Bart., MS. copy of the Discourse of Pirates owned by, 7
Mainwaring, Sir Henry, Discourse of Pirates, 3–49
dedication to James I, 3, 9–13
bibliography of, 4–8
captures Turkish pirates in the Thames, 10

Mainwaring (*cont.*)
offered a command in the Spanish fleet, 11
the Dukes of Savoy and Florence anxious to enlist his services, 11
the Conde of Porto Legro offers him a command, 11–12
the Duke of Guise offers him protection, 12
refusal of these offers, 12
his advice how to prevent and suppress pirates, 40–49
discourse concerning the French fishing upon the Sowe, 53–66
letter to Sir John Coke, 53
the *Seaman's Dictionary*, 69–260
earliest treatise in English on seamanship, 70
dedicated to, and written for the Duke of Buckingham, 70, 72–3
bibliography of the *Seaman's Dictionary*, 75–82
negotiations on behalf of Venice, 263–73
Foscarini's interview with, 265–8
Sir J. Finett's account of, 269–71
suggestion regarding the loan of warships to Venice, 271–3
Jean Chevalier's sketch of Mainwaring, 276–8
Mainwaring, Sir Thomas, note on, 284
Malaga Fleet, 33
Mamora, pirates at, 10–11
mentioned, 123
Man, to, 182–4

Man, Jonas, 71
Manger, 99, 184–5, 218
Man-of-war, cook room in, 131–3
decks, 139
definition of, 184
housing in, 167
nettings in, 191
See also Decks
Mansell, Sir Robert, Algiers expedition of, 45 *n.*
mentioned, 46 *n.*
Manti, Monsieur de, 12
Marline, 185, 199, 219
Marlin spike, 185
Martnets, 185–6, 203
legs of the, 179
Massa, pirates resort to, 36
Master, 87, 247, 253
master's cabin, 200, 205, 213, 218
Masts—
boltsprit, 105, 120, 207, 226, 235, 237, 245
bonaventure mizen, 120
foremast, 186, 199, 202, 204, 207, 236
fore-topmast, 135
heel of, 163, 224
hounds of, 125, 167, 210, 245
jury-masts, 170
main-mast, 116, 120, 186, 199, 204
mizen mast, 186, 204, 236
mizen topmast, 135
partners, 128, 137, 195–6, 255
proportions of, 186–7
sheers, 223
spritsail-topmast, 135
sprung their masts, 232–3
taunt masts, 243
topgallant mast, 135, 245
topmast, 115–6, 125, 199, 204, 209, 246

MATS

Mats, 187
Medina-Sidonia, Duke of, offers Mainwaring a command in the Spanish fleet, 11
Mehedia. *See* Mamora.
Mennes, Sir John, 281
Mervin, Sir Henry, 70, 78, 281
Messina, 272
Metal, 187
Mexico, Bay of, 93
Michielini, Lunardo, 263
Milford, pirates at, 39
Milo, pirates at, 28
Mings, Sir Christopher, seamen's love for, 281
Minim, 121
Minute glass, 181
Minute-line. *See* Log-line
Mizen-mast. *See* Masts
Mizen-sail. *See* Sails
Mizen-topmast. *See* Masts.
Mizen-yard. *See* Yards
Mockage, 130
Mogador, pirates resort to, 35
Monk-seam, 188
Monson, Sir William, on the recourse of pirates to the Irish coast, 16 *n.*
suggests sending pirates to the Galleys, 19 *n.*
captures pirates on the coast of Scotland, 38–39 *n.*
advice concerning the pirates of Algiers, 44 *n.*–45 *n.*
mentioned, 46 *n.*, 280
Montgomery, Philip Herbert, Earl of, 264, 269
Mooring, 188–9
More, Sir William, 282
Moryson, Sir Richard, on the recourse of pirates to the Irish coast, 17 *n.*, 48 *n.*
Mount, to, 189

OOZE

Moxon, Joseph, hydrographer, 75
Murderers (guns), 123, 189, 198, 228

NAIL, overhang the, 166 *and n.*, 207
Narrow Seas, fishery of, 61, 66
estimate for constant guard of the, 274–5
Neal-to, 190
Neap tide. *See* Tides
Needle (of the compass), 190–1
Nettings, 191
netting sails, 191
Newcastle, 41
Newfoundland, pirates at the great fishing bank of, 33, 37
wafters to safeguard the fisherman at, 38
ships for, 267
mentioned, 10, 41
Newman, Sir George, Judge of the Admiralty Court of the Cinque Ports, letter on the Sowe fishery, 54 *n.*–55 *n.*
Nippers (small ropes), 191, 238
Noddy (card game), 247
Northumberland, Algernon Percy, Earl of, 70
Norwich, Sir Erasmus, MS. copy of the *Seaman's Dictionary* owned by, 82
Nottingham, Earl of, mentioned, 3, 46 *n.*

OAKUM, 122, 125, 170, 192, 194
Observe, to, 192
Offing, 192
Offward, 192–3
Ons, Islas de, 34
Ooze, 194

ORDNANCE

Ordnance. *See* Guns and Gunnery
Orlops. *See* Decks
Ossuna, Duke of, 266, 268
Outlicker, 193
Overbore, 95
Overhang the nail, 166 *and n.*, 207
Overhaul, 161
Overset, 193–4
Overthrow, 194

PALOS, Cape de, 26
Parbuckle, 195
Parcel, or Parcelling, 195–6
Parrels, 195, 209, 213, 249
Partners, 128, 137, 196, 255
Passage de l'Iroise, 14
Passarado, 196, 213
Passaro, Cape, Sicily, pirates at, 27
Passenger, Thomas, 77
Paunch (mats), 196
Pawl, 116, 196, 257
Pay, to, 196–7
A-peak, 197, 210
Peeters, Peter, pirate pardoned, 21
Pendants, 198, 240
Peniche, carvells of, 47, 120
Pennington, Sir John, 274
Perforst-men, 22
Perry, a squall or contrary wind, 29 *and n.*
Peyton, Sir Henry, commands English troops in the Venetian service, 269
Pico Island, 37
Pillow, 198
Pinks, 14–15
Pintle, 198
Pirates, Mainwaring's Discourse on, 3–49

PORTS

Pirates (*cont.*)
at Mamora, 10
in Thames, 10
their beginnings, 14–17
in Ireland, 14–17
when captured should be made galley-slaves, or found useful employment, 19
bravery of, 19
assure themselves of a pardon if they take a good English ship, 21
Leghorn and Villefranche free to them, 21
how they operate at sea, 23–24
stratagems of, 24
where they revictual and refit their ships, 25–40
how to prevent and suppress, 40–49
increase of, during the reign of James I, 41
plan to suppress, on the Irish coast, 46–48
Pitching, 198–9
Plats, 199
Plot, 199, 247
See also Card (sea)
Plyers, 24
Plymouth Sound, 228
Point, a, 199–200
Pontevedra, pirates at, 34
Poop, 108, 191, 193, 200, 228
Port, 180, 200, 255
See also Larboard
Porto Farina, pirates at, 29
famous for its arsenal, 29 *n*
mentioned, 90
Porto Legro, the Conde of, his offer to Mainwaring, 11–12
Ports (of a ship), 200, 214, 221, 246

PORTUGAL
Portugal, pirates resort to the coast of, 31
Bay of, 93 *and n.*
Pouches, 93, 200
Powder, 127, 207
kinds of, 200–1
powder room, 201
Predy, 201
Preventer rope. *See* Ropes
Priming, 202
Priming-powder, 127
Proviso. *See* Mooring
Prow, 202
Public Record Office, MS. of the *Seaman's Dictionary* in, 79
Puddings (ropes), 202
Pulleys, 202–3
Pumps, 92, 128, 152, 237, 239
bilge, 98
chain, 92
kinds of, 203–4
pump-brake, 204
pump-can, 204
pump-dale, 204
sounding the pump, 229
Purchase, to, 204
Puttocks, 122, 204, 208, 226

QUARTER, the, 205, 221, 236, 246, 250
Quarter winds, 205, 217
Quarter-deck. *See* Decks
Quartering, 205
Quartermasters, 87
Queensborough, 15
Quoins, 96, 205, 230

RABBETING, 206
Rainborowe, Thomas, 281
Rake, 206–7, 211

ROPES
Raleigh, Sir Walter, at Lanzarote, 36 *n.*
anecdote of, 42 *n.*
Ram-head, 207–8, 212–13, 245
Rammer, 207, 232
Ranges, 207–8
Rat Isle (? Rhe), 40
Ratling, 208
Reach, a, 208
Reeve, 208
Rhe, 40
Rhodes, pirates at, 28
Ribs (of a ship), 208–9
Ride, 209, 225
Riders, 210
Rigging, 210–11
See also Ropes
Ring-bolts. *See* Bolts
Rio d'Oro, 36
Rising timbers, 211
Risings, 126, 211
Road, 211
Roader, a, 212
Robands. *See* Robbins
Robbins (robands), 202, 212
Roca, Cape (Rock of Lisbon), 32
Roof-trees, 174, 178, 191, 212
Roomer, 95
Rope yarns, 213
Ropes—
boat rope, 103, 212
boat's seizing, 219–20
bolt-ropes, 101, 111, 134
bowlines, 107, 134, 161, 166, 173, 208, 241, 250
braces, 108, 128, 203, 241
brails, 108
breast fast, 110
breast ropes, 110, 195, 213
breechings, 110
bucket rope, 212
buoy rope, 212, 257
catharpings, 121

ROPES

Ropes (*cont.*)
clew garnets, 126, 142
coiled, 128–9
collar, 129
cringles, 108, 111, 134
crow-feet, 135, 138, 210, 235
entering rope, 144, 212
guest-rope, 103. 212
guy rope, 159
halliards, 86, 135, 152, 160, 175, 207–8, 245
head-lines, 162, 212
horse, 165–6
jeer rope, 116, 169
keel-rope, 171, 212
knave-line, 172
lashers, 176
lee-fangs, 179
lifts, 180, 197
nepasarceua, 196
nippers, 191, 238
parbuckle, 195
passarado, 196, 213
pendants, 198, 240
plats, 199
preventer rope, 212
puddings, 202
rudder rope, 212, 214
runner, 195, 216–17
slatch of the rope, 227
smiting line, 228
splicing, 231
standing parts of running ropes, 233
standing ropes, 233
stern-fast, 110, 122
tackles, 241–2
ties, 245
top ropes, 212, 246
topsail halliards, 128
trusses, 249–50
See also Cables, Hawser
Rough-trees. *See* Roof-trees
Round-house, 213

SAIL

Round-in, 213
Round shot, 225
Rouse-in, 213
Roves (small metal plates), 127 *and n.*, 214
rove and clinch, 214
Rowl, 214, 256
Rudder, 158, 164, 214, 226
gudgeons, 214
pintles of, 198, 214, 228
rowl, 214, 256
rudder-head, 128
rudder-irons, 214–15
rudder-rope, 212, 214
See also Tiller, Whip
Rummage, 215
Run, 215
Rung-heads, 216, 227
Runner (rope), 195, 216
Running ropes, 217
Rupert, Prince, letter of, 283
Rut (i.e. route), 32
Rye, fishery of, 53–66
decay of, 59
seamen of, 60, 65
price of fish at, 61
attacks on fishermen of, 62
Mainwaring's suggestion for reviving the fishing industry of, 65

SAFFI, 211
pirates resort to, 35
Sail, bunt of a, 111, 112, 121
clew of, 111, 126, 156, 179, 196, 198, 219, 223, 240
earing of, 126, 178
eyelet-holes of, 145, 176, 212
farthelling, 108, 112, 121, 127, 146, 228
goring, 126, 156
headline, 212

SAIL

Sail (*cont.*)
hullock of, 169
latchets, 105, 145, 176
leech of, 134, 178–9, 217, 223, 236
spill the sail, 230
strike down a sail, 239
Sails—
bonaventure, 120, 188
bonnet, 105, 134, 141, 145, 174, 176, 179
drabler, 105, 141, 145, 174, 176
drift sail, 142
foresails, 106, 127, 133, 146, 179, 213, 232, 241–2
goose-wing, 155–6
head-sails, 162, 217
lateen sails, 120 *n.*
main sail, 105, 120, 127, 133, 146, 179, 213, 242
mizen sail, 120, 133, 179, 187–8, 217
sprit sails, 94, 105, 107, 127, 143, 228, 231, 241
studding sails, 106
topgallant sails, 112, 127
topsails, 127, 217, 238
St. George's Channel, 123
pirates in, 39
St. Maries, Cape, 31, 33
St. Peters, island off Sardinia, pirates at, 27–28
Saint Valery, fishermen of, 58, 63, 65
St. Vincent, Cape, 31–33
Salamon, Cape, 28
Sallee, pirates at, 10, 35
Salvora, 34
San Lucar, 32, 33
San Martin, Cape de, 26
Santa Cruz, pirates resort to, 36
the wind at, 100, 137

SHEERS

Sardinia, 27
Savoy, Duke of, offers Mainwaring a pardon, 11
Scambling (slipshod), 83
Scarf, 217–18
Scarponto, 28
Scotland, pirates on the coast of, 38
Scott, Mr. Charles, original MS. of the *Seaman's Dictionary* belonging to the late, 72, 81
Scott, Mrs. Charles, 74
Scuppers, 204, 218
scupper leathers, 218
scupper nails, 219
Scuttle, 218
Sea, trough of the, 249
Sea-gate, 88, 90, 136, 196, 209, 211, 257
Sea turn (a breeze), 110
Seamen, English, loth to serve in the King's ships, 41
Seeling, 219
Seizing, 219–20
Send, 220
Sennit, 220
Serve, to, 220
Set, to, a land, sun, or ship by the compass, 220–1
Settle a deck, 221
Sewing, 221
Shackles, 221
Shakespeare, supposed scene of the *Tempest*, 28 *n.*
Shallops, 103
Shank, 222
Shank-painter, 222
Sheathing, 222
Sheave. *See* Shivers
Sheepshanks, 222
Sheer hooks, 222–3
Sheering, 223
Sheers, 223

Sheets, 223–4, 233, 251
false sheet, 224
fore topsail sheets, 207–8
fore-sheet, 199, 213, 223–4
lee sheets, 205, 241
main sheet, 213, 223
topsail sheets, 202, 207, 242
weather-sheet, 200
Sheevers. *See* Shivers
Ships, English merchant ships loaned to Venice, 267
suggested loan of English warships to Venice, 271–3
proposition for ships and pinnaces for guard of the Narrow Seas, 274–5
Ship's boat, 103–4
Ships named—
Bonaventure, 21 *n.*
Concord, 21
Peter and Andrew, 38
St. Claude, 281
Shivers, 100, 121, 203–4, 207, 224, 228, 246, 257
Shoal, 224–5
Shore, 225
wash of the, 253
Shores (pieces of timber), 225
Shot, various kinds of, 225
Shot of cable, 225
Shrouds, 121–2, 161, 204–5, 208, 216, 220, 222–3, 225–6, 240, 242–3, 249, 258
Sicily, 27
Skeg, 226
Skiffs, 103
Slatch, 226–7
Sleepers, 227, 233
Sling, to, 227
Slings, 122, 227–8, 245
Smith, Captain John, *Accidence for all Young Seamen*, 71
Smith, Ralph, 77

Smiting line, 228
Snatch block, 228, 257
Sockets, 228
Soles, 55
price of, 61
Sound, a, 228–9
Sound, to, 229
sounding-lead, 229
sounding-line, 229
Sound, The, 228
pirates in, 33
Sowe, Mainwaring's Discourse on the French fishing upon the, 53–66
a fishing-ground between Rye and Dieppe, 54
extent of, 54, 55 *n.*
evils of allowing the French to fish at the, 56 *et seq.*
illegal fishing of the French at, 62–65
Spain, pirates resort to the coast of, 31, 33, 39
yearly Brazil fleet of, 32
threat to Venice, 265–73
Spartel, Cape, 34
Spell, 229–30
Spend, 230
Spigots (taps), 204
Spikes, 230
Spill, 230–1
Spindle (of the capstan), 231
Splice, 231
kinds of, 231
Split, 231
Sponge, the, 231–2
Spoon, to, 232
Spring, to (a mast), 232–3
Spring-tide, 232
Sprit-sails. *See* Sails
Spritsail topmast. *See* Masts
Spritsail-yard. *See* Yards
Spun-yarn, 233
Spurkets, 233

STANCHIONS
Stanchions, 159
Standing parts of running ropes, 233
Standing ropes, 233–4
Starboard, 130, 180, 200
  starboard watch, 253
Stay, to, 234, 241
Stays, 175, 234–5, 249
  back stays, 135, 198, 234–5
  forestay, 235
  mainstays, 129, 138, 235, 252
  mizen stay, 235
  topmast stay, 235
Steer, to, 235–6
  See also Cond
Steerage, 189, 205, 236, 247, 256
Steeving, 94
Stem, 236
Step, 236
Stern, 236
Stern-fast, 110, 122
Stern-ports, 122, 256
Stern-post, 214–15, 224, 226
Stern-sheets, 224
Steve, or Steving, 237
Steward's room, 218, 237
Stirrup, 237
Stoaked, 92, 237
Stop, 237
Stoppers, 144, 175, 237–8
Stow, to, 238
Strake, 238
Strap (a rope), 238–9
Stream anchor. *See* Anchors
Stream cable, 239
Stretch, 239
Strike, to, 239
Studding sail. *See* Sails
Suck, 239
Suffolk, Lord Thomas Howard, Earl of. *See* Howard
Surge, 240
TIGHT
Susa, pirates at, 29
Swifters, 226, 240
Swifting, 240

TACK, to, 241
Tackles, 241–2
  gunner's tackles, 242
Tacks, 219, 240–1
  fore tacks, 93, 129, 207, 213, 240
  main tacks, 129, 213
  See also Ropes
Taffny, pirates resort to, 35
Tally, 242
Tampkin, 242
Taper bore, 242
Tapering, 242
Tarpaulin and Gentlemen Commanders, 279–81
Tarpawling, 242
Taunt, 242–3
Taut, 243
Teelin Head, 47
Tempest, 243
Teneriff, wind at, 100–1
Tetuan, pirates at, 26
Thames, 263
Thaughts, 243
Thight (tight), 243
Thornback (ray), price of, 61
Thowles, 243
Thwart-ships, 243
Tides, 243–4
  ebb tide, 244
  flood tide, 244
  leeward tide, 244
  neap tides, 190, 232
  spring tides, 232
  tide-gate, 223, 244
  windward tide, 244
Tier, 245
Ties, 245
Tight. *See* Thight

TILBURY
Tilbury Hope, 15
Tiller, 98, 245
Tlemçen, pirates at, 26
Tonge Castle, Shropshire, 283
Top-armours, 245
Topgallants. *See* Masts
Topmast. *See* Masts
Top ropes, 212, 246
Torbay, 93
Tow, to, 246
Trammels, 57, 60
Transom, 113, 133, 205, 236, 246–7
Traverse, 37, 247
Traverse Board, 247
Trenails, 122, 177, 192, 248
Treport, fishermen of, 58, 63, 65
Tres Forcas, Cape, 27
Trestle-trees, 135, 248, 255
Trevor, Sir Sackville, 274
Trice, to, 248
Trim (of a ship), 248
A-trip, 154
Trip, 154
Tripoli, pirates at, 29
Trough of the sea, 249
Trucks, 249
Trumpeters, 87, 160
Trunnions, 116, 125, 249
Trusses (ropes), 249–50
Try, to, 142, 250
Tuck, the, 250
Tunis, pirates of, 4, 10, 25, 29, 43
Dey of, 11, 26
laws of, 42
Turbots, 55
Turn, to. *See* Board

VEER, 250
Veering, 251
Velez Malaga, 30

WEATHER
Venice, Mainwaring's negotiations on behalf of, 263–73
Gondomar's threat against, 266
English troops for, 269
Mainwaring's suggestion regarding the loan of warships to, 271-3
galligrosses of, 28
Villefranche, 21
Violl, 251

WAFT, to, 251–2
Wafters (convoys), 38, 251
Waist (of a ship), 252
Waist-boards, 252
Waist-cloths, 147, 252
Waist-trees, 159, 174, 178, 191, 252
See also Roof-trees
Wake (of a ship), 252
Wale, 97
See also Bend, Chain-wales
Wale-knot, 237, 240, 251
Wall-reared, 252–3
Walt, 253
Ward, John, pirate, 21 *n.*
Warp, 253
Wash a ship, 253
Wash of the shore, 253
Watch, 253
Water-borne, 254
Water-line, 254
Water-shot, 254
Waterward, 192
Water-way, 254
Way of a ship, 254–5
Waying, 254
Weather, to, 255
Weather bow, 255
Weather coil, 255

Weavers, 55, 61
Wedges, 255
Whelps (of the capstan), 116, 196, 253
Whip, the, 98, 164, 214, 255–6
whip staff, 239
Whistles, 160
Wholesome, 256
Whoodings, 256
Winchilsea and Nottingham, Earl of, MS. of *Discourse of Pirates* belonging to, 7
Wind, 100–1, 106–7, 110, 114, 130, 144, 154, 155, 162, 173, 175, 200, 205, 209, 241, 243, 245, 247, 251, 258
Wind, to, 256
Winding tackle, 257
Windlass, 160, 257
Wind-taut, 258
Wood and wood, 258
Woold, or Woolding, 258
Worm, 258
Worming, 258

YARDS—
cross-jackyard, 108, 135, 259
fore-yard, 169–70, 179, 196, 202, 210, 222, 245, 250, 259
main yard, 169, 170, 179, 196, 202, 222, 245, 250
mizen yard, 108, 170, 228, 245, 250
spritsail yard, 245, 259
topgallant yards, 180
topsail yards, 180, 245, 259
yardarms, 210, 222
Yaw, 130, 235, 259
Yoke, 260

ZANTE, 28
Zouch, Lord, Lord Warden of the Cinque Ports, 58 *n.*, 62, 268
copy of the *Seaman's Dictionary* dedicated to, 72–74, 78
Zowe. *See* Sowe

Printed in England at THE BALLANTYNE PRESS
SPOTTISWOODE, BALLANTYNE & CO. LTD.
Colchester, London & Eton

The accompanying volumes, viz.:

Vol. LV. The Letters of Lord St. Vincent (Vol. I)

Vol. LVI. The Life and Works of Sir Henry Mainwaring (Vol. II)

are issued on the subscription for the year 1921.

June 1922.


GretagMacbeth™ ColorChecker Color Rendition Chart